THE MIND OF MITHRAISTS

HISTORICAL AND COGNITIVE STUDIES IN THE ROMAN CULT OF MITHRAS

LUTHER H. MARTIN

SCIENTIFIC STUDIES OF RELIGION
INQUIRY AND EXPLANATION

BLOOMSBURY

The Mind of Mithraists

Scientific Studies of Religion: Inquiry and Explanation

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Bloomsbury Academic
An imprint of Bloomsbury Publishing Plc

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An imprint of Bloomsbury Publishing Plc

50 Bedford Square
London
WC1B 3DP
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1385 Broadway
New York
NY 10018
USA

www.bloomsbury.com

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First published 2015
Paperback edition first published 2016

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British Library Cataloguing-in-Publication Data
A catalogue record for this book is available from the British Library

ISBN: HB: 978-1-4725-8419-9
PB: 978-1-4742-8869-9
ePDF: 978-1-4725-8420-5
ePub: 978-1-4725-8421-2

Library of Congress Cataloging-in-Publication Data
Martin, Luther H., 1937-
The mind of Mithraists : historical and cognitive studies in the Roman cult of Mithras / Luther H. Martin.
pages cm
Includes bibliographical references.
ISBN 978-1-4725-8419-9 (hardback)
1. Mithraism. 2. Cognition and culture. I. Title.
BL1585.M25 2015
299'.15 – dc23
2014025797

Series: Scientific Studies of Religion: Inquiry and Explanation

Typeset by Integra Software Services Pvt. Ltd.
Printed and bound in Great Britain

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Acknowledgments

This volume reprints essays on Mithraism I have written since 1989. It is impossible to thank by name all of my colleagues who have commented on, contributed to, and criticized *in progressum* the essays here collected but I have benefited from all and many. I should, however, like especially to thank two longtime colleagues whose input has been especially important (whether or not they have agreed with the final results). First is my longtime friend and colleague at the University of Vermont, Professor William E. Paden, and second is my long-distance friend and colleague at the University of Toronto, Donald Wiebe. I would like especially to thank Professors Roger Beck, also at the University of Toronto and the acknowledged "Dean of Mithraic Studies," for his support of my work and his friendship, and Aleš Chalupa, of Masaryk University, for inviting me to the position of Visiting Professor at his university and for our ongoing conversations concerning the Roman cult of Mithras. I would like to thank my former (undergraduate) student Dr. Steven Hrotic, who was my editorial assistant in the preparation of this volume. His general understanding of my work and his careful eye for detail have greatly facilitated the preparation of this volume for publication. And, of course, I must express my appreciation to Lalle Pursglove and Anna MacDiarmid, respectively, Commissioning Editor and Editorial Assistant at Bloomsbury Press, who have so capably shepherded this volume into print and Avinash Singh for his remarkably astute and forbearing project management. Finally, I would like to thank Patricia Johnston for permission to reprint her photograph of the Psyche and Amor relief from the mithraeum of Capua Vetere, Italy.

With the exception of Chapters 6 and 7 (previously unpublished), the essays in this volume have been reprinted in the form in which they first appeared with only typos corrected (although it is imprudent to claim that all have been finally identified) and references updated and reformatted. I should like to acknowledge the original place of publication and to thank the respective publishers for their permission to reprint these articles in this volume

(with the exception of Chapter 2, for which my efforts to contact the original publisher, "L'erma" di Bretschneider, remain unanswered).

Chap. 1. "Roman Mithraism and Christianity." *Numen* 36 (1989), 2–15.

Chap. 2. "Reflections on the Mithraic Tauroctony as Cult Scene." In: *Studies in Mithraism*, edited by. J. R. Hinnells, Storia delle Religioni 9, 217–224. Rome: "L'erma" di Bretschneider, 1994.

Chap. 3. "The Roman Cult of Mithras: A Cognitive Perspective." *Religio. Revue pro Religionistisiku* 14 (2006), 131–146.

Chap. 4. "Ritual Competence and Mithraic Ritual." In *Religion as a Human Capacity: A Festschrift in Honor of E. Thomas Lawson*, edited by T. Light and B. Wilson, 245–263. Leiden: E. J. Brill, 2004.

Chap. 5. "The Ecology of Threat Detection and Precautionary Response from the Perspectives of Evolutionary Psychology and Historiography: The Case of the Roman Cults of Mithras." *MTSR* 25.4/5 (2013), 431–450.

Chap. 8. "The Amor and Psyche Relief in the Mithraeum of Capua Vetere: An Exceptional Case of Graeco-Roman Syncretism or an Ordinary Instance of Human Cognition?" In *Mystic Cults in Magna Graecia*, edited by P. A. Johnston and G. Casadio, 277–289. Austin: University of Texas Press, 2009.

Chap. 9. "The (Surprising Absence of a) Mithras Cult in Roman Egypt." In *Alternative Voices: A Plurality Approach for Religious Studies*, edited by A. Adogame, M. Echtler, O. Freiberger, 100–115. Göttingen: Vandenhoeck and Ruprecht, 2013.

Foreword

Long ago a teacher of mine told me that if history isn't exciting it probably isn't true. Luther Martin has written much exciting history and no dull history, and so he has surely met this necessary condition for historiographical veracity. Of course, it's not just—or even primarily—a matter of getting the facts right, but of finding and marshaling the germane ones and, above all, of posing the proper questions.

Luther Martin has brought to the study of the Roman cult of Mithras not only his sense of scholarly adventure, but also his deep learning and experience in the academic study of religion. He has been a forceful but always properly skeptical proponent of the burgeoning new subfield of the Cognitive Science of Religion, and it is for this expertise that ancient historians with an open mind will value this collection of essays. Equally, scholars of religion will profit from Martin's excellent grasp of ancient history and of the societies of the Hellenistic and Roman Imperial ages.

Everyone has a favorite. Mine is Martin's exploration of the mental construction of space and spaces in the essay "Landscape and Mindscape … " (Chapter 6), since cognitive mapping and the cognized environments of the Mithraists is a special concern of mine. Others will have other favorites, but I confidently predict that there will be no one (except the very dull, who will probably not open this book in any case) who will not find something, probably several things, to treasure.

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Introduction

Hellenistic religions

As a graduate student wandering the streets of Rome in 1966, I first encountered the Roman cult of Mithras when, quite by accident, I stumbled upon excavations of the mithraeum, or Mithraic temple, beneath the Basilica of San Clemente. I still remember my curiosity while descending the stairs from the present twelfth-century basilica to the level of a fourth-century church beneath dedicated to St. Clement and, then, descending further to a third level where an impressive first-century Roman *palazzo* was separated by a narrow passageway from an *insula* or apartment house. It was in the courtyard of this *insula* that a mithraeum had been constructed ca. 200 AD.

In the front of the mithraeum, between its characteristic side benches, was an altar with its mysterious portrayal of the god Mithras slaying a bull. The sound of running water draining from a lake that had accumulated beneath this level into the Cloaca Maxima, the ancient Roman sewer system, through a tunnel constructed in 1912–1914, only contributed to my fascination with this humid, dimly lit excavation.

I continued my journey through southern Italy, with a stop at Pompeii, and on to Sicily, where I attended an international conference on Gnosticism. I then traveled on to Greece where I visited such classic cult sites as Mycenae, Epidauros, Eleusis, and Delphi. As a result, my research interests increasingly turned to the area of Hellenistic religions generally, an interest that culminated some twenty years later in my book *Hellenistic Religions: An Introduction* (1987).

When I began working on this book in the mid-1980s, the heterogeneity of Mediterranean religions embraced by the expansive conquests of Alexander the Great, if considered at all, were studied largely by New Testament scholars interested in the "pagan" background against which the inauguration of a new Christian era might be contrasted. Since then, there has been an explosion of

interest by historians in these fascinating examples of religious formations and transformations in their own right. The year in which my book was published alone saw the appearance of Walter Burkert's important study of the *Ancient Mystery Cults*, Marvin Meyer's anthology of texts pertaining to these mysteries (*The Ancient Mysteries: A Sourcebook*), and Robin Lane Fox's magisterial study of *Pagans and Christians*.

My approach to the bewildering array of religious alternatives during the Hellenistic period of history—within which I include the various early Christianities—was to map comparatively their permutations and their transformations, their similarities and their differences, by situating them in relation to the architecture of the Ptolemaic cosmology, the dominant scientific paradigm of the day, which they all to some extent shared and to which their mythic and iconographic expressions were more or less explicitly referenced. Although I would most certainly revise and refine any number of my descriptions and conclusions in light of the profusion of more recent research, I believe that the fundamental structure of my presentation of these religions in terms of the dominant cosmological representation of the Hellenistic era remains sound. I should, however, like to call attention to a series of articles in which I have suggested that the original cosmological framework of my presentation would benefit by supplementing it with two additional levels of analysis, the communal and the cognitive.

I began to explore the various kinds of social formations that were prominent during the newly cosmopolitan Hellenistic era—schools of philosophers, guilds of astrologers/astronomers, and, especially, diasporic cults of religious propagandists—and the kinds of perceived problems they addressed—whether social, political, economic, intellectual, spiritual, or some combination of these. I discovered that sociopolitical—including religious—formations during this era (and perhaps during all other eras as well) could be modeled on the basis of two ideal types: fictive kinship (e.g., the community clubs and *collegia* that proliferated during the Hellenistic period) and kingship, the ambitions for the consolidations of power, whether political or religious, during this same period (Martin 1997a, 1997b, 2003a). By identifying the similar structures of any formal religious system, we come closer to understanding their distinctively expressive social, political, and economic productions as well.

Nevertheless, the notion of a discrete "social group" is an academic abstraction, for social groups are characterized by notoriously porous boundaries and exhibit among their distributed membership a diversity of interpretations of their rites and rules. Rather, it is more accurate to consider social groups as a stipulated aggregate of individual minds that share a more or less common set of behaviors and beliefs. Such an approach opens levels of analysis that address questions as to how human minds represent religious, social, and cosmological ideas in the first place, how these representations are transmitted from mind to mind, how and why just certain behaviors are associated with these ideas and representations, how these ideas and behaviors come to be related one to another among a population in a common domain in order to constitute what might, in this sense, be termed a particular "culture," and how that "culture" is remembered/retained and transmitted in ways that constitute certain enduring sociopolitical features.

In a more recent series of articles, I have been exploring the relevance of the capacities and constraints of human cognition in representing, selecting for, and transmitting just those cosmological ideas and communal structure that we associate with Hellenistic religiosity (Martin 2003b, 2003c/2004a, 2004b, 2005). For any community, religious or otherwise, to be judged successful, that is, to maintain itself transgenerationally, it must encode what it selects and holds to be significant knowledge in a way that is memorable and it must effectively and efficiently transmit that knowledge. The sociopolitical dynamics of any human association are determined, in other words, as much by universal biological and cognitive constraints as by particularistic social and historical developments (e.g., Whitehouse 2000, Martin 2001). The ability to outline comprehensively those mental mechanisms whereby the cosmological and communal representations of the Hellenistic period and, consequently of the religions of this and of all eras, are produced and transmitted is a rapidly growing area of research.

The incongruous relationship between Hellenistic assumptions about the ordered structure of the cosmos, the primary framework of my initial study of Hellenistic religions, and the widespread concern with the capricious and unpredictable effects of "luck" during this same period (a primary theme of this volume) might suffice to indicate the promise of a cognitive approach to the historiographical issues of Hellenistic religions. If the diverse cultural—

literary, philosophical, and religious—thought during the Hellenistic era referenced assumptions of a given, uncreated order as expressed in the structures of Ptolemaic cosmology, why then did inhabitants of this era so often represent their existence as fortuitous—as subject to *moira*, *tychē*, *fortuna*, and *heimarmenē*?

Hellenistic religiosity, I argue, is largely concerned with representing luck as a kind of intentional agent—an agentive representation that cognitive scientists of religion have since argued is a necessary characteristic for all "religious" formations (e.g., Boyer 2001; Lawson and McCauley 2001). Such representations suggest that the same cognitive templates that predisposed the Greeks and Romans to represent surprising but mundane events as the actions of gods and goddesses also predisposed them to personify luck. Such re-representations of non-agentive luck as intentional agency, for example, as *Tychē Agathē* or, in the guise of traditional deities, for example, as *Isis Tychē Agathē*, allowed them to engage in actions or rituals that might influence and improve their fate. This religious re-representation of capricious fortune as benevolent agent aligned the unpredictability of luck with intellectual presumptions about the predictive character of cosmic order. The ready representation of intentional agency is a cognitive bias of humans (and other animals) that is itself a by-product of the cognitive capacity to identify events in the world on the basis of incomplete data and to infer causes from that data efficiently, both representing products of natural selection that would greatly enhance possibilities of survival in a complex world of predation and predators (Slone 2003).

The fundamental assumption of the cognitive sciences is that the human brain has been shaped by evolutionary processes of natural selection and that its implicit functions are, therefore, common to the species *Homo sapiens*, both now and in the distant past. There is, therefore, no fundamental distinction between brain and mind. This insight presents the possibility that knowledge about the architecture of the human mind currently being researched might begin to offer explanations for why humans have tended to organize themselves in terms of just the types of sociopolitical organization that they have historically and why these groups have selected and transmitted just the ideas and behaviors which they have, rather than others that were historically extant or possible.

The Roman cult of Mithras

In thinking and writing about the issues, both historical and methodological, in the study of Hellenistic religions, I increasingly began to focus on the Roman Cult of Mithras as an *exemplum*. I did so for reasons other than nostalgia about my initial youthful foray into the complex field of Hellenistic religions initiated by my accidental visit to the Mithraic excavations at S. Clemente—although certain reminiscences about that visit and my lingering curiosity about that mithraeum and about the minds of those meeting there must surely have played a role in my continuing interest in this cult.

The proximate reason for my "return" to a study of Mithraism was the hiring of David Ulansey as a sabbatical replacement at the University of Vermont, Fall 1984. David, fresh from completing his PhD at Princeton University that year, offered a seminar on the subject of his dissertation, a new interpretation of the Roman cult of Mithras (subsequently published as Ulansey 1989). This new interpretation situated the origins of this cult in the Roman Empire rather than as a historically diffused tradition from Persia and understood the tauroctony as a star-map rather than as an episode from a mythic life of Mithras. (I remember David, an amateur astronomer, telling me that when he was first presented with the tauroctonous image as a student in a Graeco-Roman religions course at Princeton, his reaction was "that looks familiar to me.") These two points of explanation, the Roman provenance of Mithraism and an understanding of the tauroctony as a star-map, are now accepted by virtually all Mithraic scholars and were presented to me by David just in time to revise the chapter on Mithraism for my *Hellenistic Religions*.

Subsequently, I decided, while a fellow at the American Academy in Rome in 1987, to visit literally every mithraeum in Rome as well as those in the surrounding area, for example, Sutri, Marino, and, of course, the seventeen mithraea in Ostia. I first presented the results of this research (reprinted here as Chapter 1) at a lecture at the University of Toronto, where, timorously, I first met Roger Beck, the "Dean" of Mithraic studies, who warmly responded to my initial foray into Mithraic studies. Three years later, I returned to Rome to attend the XVIth Congress of the International Association of the History of Religions where I presented a paper to a special

panel on Mithraism organized by J. R. Hinnells (reprinted here as Chapter 2). At this conference, I again met Roger Beck, who has graciously supported and encouraged my work on Mithraism since. By that time, I had become interested in the emerging area of cognitive science of religion (Chapter 4), an approach that Roger had also begun to explore (see especially Beck 2006). At this conference, I also met Panayotis Pachis (Aristotle University), who has since been my colleague and conversation partner in all things having to do with Hellenistic religions. Panayotis first introduced me to the little-known Mithraic finds from Thessaloniki and, subsequently, to the impressive archaeological site of Dion.

During other travels, both professional and recreational, I was able to view Mithraic excavations in disparate parts of the former Roman Empire. In England, for example, I visited those along Hadrian's Wall and in London; in Germany, those clustered along the Rheine in Köln, Wiesbaden [Heddernheim], and Darmstadt [Dieburg]; and those along the Danube, in Carnutum, near Vienna, and Aquincum in Budapest. And, of course, to consider the numerous Mithraic finds exhibited in the museums of these areas.

The Roman cult of Mithras, I came to understand, was the most widely dispersed and densely distributed cult throughout the expanse of the Roman Empire from the end of the first until the end of the fourth century AD. This growth rivaled the growth and development of Christianity during the same period. As its membership was largely drawn from the ranks of the military, its spread (but not its popularity) is attributable to military deployments and redeployments. Although Mithraists left behind no written evidence, there is an abundance of material and iconographic remains from these distributed mithraea. The only characteristic common to all mithraea, or Mithraic temples, however, was the fundamental architectural design of their mithraea and the cult image of Mithras slaying a bull. The historical question is how these two features were so faithfully transmitted throughout the empire by a non-hierarchical religious movement with no centralized organization.

From a more reflective, methodological (historiographical) perspective, I was fascinated by an empire-wide Roman cult that recorded no mythological narratives—at least none that have been discovered over the past two millennia. Nor were any mythological narratives attributed this cult by their contemporaries. This absence of mythic references is noteworthy since Mithraism was a cult scattered throughout a fairly literate culture within which

myths were recorded by and/or reported for other religious traditions of the time, especially by Mithraism's developmental contemporary, Christianity. This absence of Mithraic texts does not mean, however, an absence of Mithraic data: over 700 Mithraic sites have been discovered (and more continue to be identified), as well as more than 1000 inscriptions. Unfortunately, the text-centric bias of traditional historiography has led to scholars to "read" Mithraic material remains and iconography from often vastly different contexts as a common Mithraic myth to be decoded from its mysterious symbology. I began to think that the texts themselves—material remains inscribed on papyrus or parchment, stone, or fresco—should be read as extractions of the minds of their authors rather than as "primary" (and therefore reliable) sources of historical information. If so, the Roman cult of Mithras offers an excellent historical *exemplum* for this methodological experiment. Nonetheless, the widespread but faithful transmission of the architecture of the mithraeum and of the tauroctony, its central cult image, throughout the expanse of Roman Empire by a collection of non-hierarchical, non-centralized cult cells has defied traditional historical explanation.

The minds of Mithraists

Even more problematic than doubting that there was ever a Mithraic mythic narrative shared by all Mithraic cells throughout the empire, or even most of them, is the attempt to formulate the ideas and behaviors of this cult in terms of "mind." Since the "cognitive turn" taken by some in the study of religion during the final decade of the past century, "mind" has become understood as functions of the *Homo sapien* brain. Might the cognitive proclivities of and constraints upon the functions of human brains, shaped as they are by an evolutionary history common to our species, offer some insight into the minds and behaviors of historical subjects? Clearly (I take it), a cognitive historiography won't, and can't, supplant traditional historical methods nor will it answer many historical queries. However, it does add a useful complementary tool to the methodological toolkit of historians.

Together, an integrated cosmological-communal-cognitive approach can be sketched whereby historians, including historians of religion, might organize the fragmentary data of this ancient religion and draw their

historiographical conclusions with greater precision and confidence than might otherwise be the case. I have attempted to illustrate this approach with my studies in the Roman cult of Mithras. My cognitive interpretations of Mithraic ritual (Chapters 4 and 5) are framed by conventional historical studies (Chapters 1, 2, and 9), emphasizing the complementary nature of these approaches. Chapter 1 was written prior to the "cognitive turn" in the study of religion and Chapter 2 at the very beginning of that turn but little influenced by it; both raise questions about traditional historical interpretations of Mithraism. Chapter 8 contrasts a historical explanation for an image, uncharacteristic to its Mithraic context, with a cognitive explanation for this anomaly. Chapter 6 explores a "network analysis" of Mithraism, a relatively new approach to ancient history. However, since the spread of Mithraism was embedded in that of other institutions, primarily through deployments and redeployments of the Roman legions, an autonomous Mithraic network never developed, although some intercult liaisons have been identified. Chapter 7, consequently, explores the role of memory in the faithful distribution of the tauroctony. Chapter 9, on the other hand, and with no reference to cognitive insights, explores why Mithraism never appealed to the "mentality" of Roman occupation forces in Egypt.

1

Roman Mithraism and Christianity

Unlike early Christian sites, which were recorded as the foci of cult activity and which often perdured as the loci for later architectural exploitation, the locations of Mithraic sites went unrecorded and have been discovered quite by chance as a result of modern restorations or excavations directed toward other ends. In addition to earlier known sites concentrated in the Rhine and Danube regions, twentieth-century discoveries have produced a steady flow of new Mithraic finds in Italy, especially in Ostia and Rome.[1] When Franz Cumont, the father of modern Mithraic studies, published the second volume of his charter work in 1899, only three mithraea were known in Ostia; now at least fifteen have been identified. And, in Rome, discoveries have continued apace with the uncovering of such major mithraea as those in the Baths of Caracalla and the Circus Maximus, the Barbarini and the S. Prisca mithraea, and, more recently, in the *castra peregrinorum*, discovered during the renovations of S. Stefano Rotondo (Beck 1984: 2008–2013, 2026–2033). The flood of new Mithraic discoveries in the capital of the Roman world allowed Cumont to conclude by 1945 that Rome was the capital of Mithraism, and almost the seat of its papacy (Beck 1984: 2020). The density of Mithraic finds in and around the city emphasizes it importance for any understanding of the relationship of Mithraism to Christianity.

i

As with so much else, the traditional understanding of the relationship between Christianity and Mithraism has been based on the polemical judgments of the church fathers (Colpe 1973). Since Justin's accusation in the mid-second century that Roman Mithraists were diabolically imitating

the Christians, the two religions have been considered rivals for the religious allegiance of the West (Justin, *i apol*. 66 and *dial. Typho*; see also Tertullian, *de praescr. haeret*. 40; *de bapt*. 5; *de cor*. 13).[2] In 1882, Ernst Renan summarized this view for modernity in his widely cited judgment: "If the growth of Christianity had been arrested by some mortal malady, the world would have been Mithraic."[3] Several years later, Cumont concurred, writing of the "ferocious and implacable duel" between Mithraism and Christianity for "the domination of the world" (Cumont 1903 [1956]: v). Although M. J. Vermaseren, the greatest modern interpreter of Mithraism, found Cumont's opinion to be "too sweeping" (Vermaseren 1963: 188), he nevertheless perpetuated the conventional view of Christianity and Mithraism as "deadly rivals" (Vermaseren 1963: 11).

Father Leonard Boyle, former Prefect of the Vatican Library who resided above a famous mithraeum in Rome, S. Clemente, has written that "too much … has been made of the 'threat' of Mithraism to Christianity." He based his judgment on the evidence of "only fifty known mithraea for a Rome of about one million inhabitants in the third century" (Boyle 1987: 71). But Filippo Coarelli has estimated that as many as 2000 mithraea might have existed in Rome, a figure he arrives at by analogy to Mithraic finds in Ostia in proportion to its population and by assuming that the population of Ostia was 1/50 that of Rome (Coarelli 1979: 77). However, population estimates for Rome range from 538,000 to 1,250,000 in the mid-second century when its population was greatest, and from 250,000 to 800,000 at the time of Constantine (Krautheimer 1980: 4 and Boak 1955: 62). If the population of Rome—for which more information is available than any other city in the empire—is so uncertain, population estimates for Ostia, which range from 20,000 to 58,000, are even more so (Packer 1967 and 1971—20,491–24,491 inhabitants; Calza 1959—36,000; Meiggs 1973: 532–534—58,000. See Duncan-Jones 1974: 276, n. 7). Such differences in estimates depend on such variables as the calculation of the slave population, the size of households, the number of persons in each house, life expectancy, and various uses of modern population figures as a basis for calculating those of antiquity (Boak 1955: 7, 9–14), and demonstrates that it is simply not possible to arrive at any such calculations with even approximate exactness (Meyer 1954; Boak 1955: 20).

More conservative than his estimate of Roman mithraea based on population estimates, is Coarelli's estimates, based on topographical distribution that

just under 700 mithraea should exist in Rome. This estimate is based on the thirty-three hectares of Ostia that have been systematically excavated out of a total of seventy, or approximately one half of the ancient town. Since the fifteen Ostian mithraea are evenly distributed throughout the town, two per hectare, Coarelli estimates that a comparable distribution throughout the 1,373 hectares within the Aurelian walls of Rome would result in 680–690 mithraea (Coarelli 1979: 77).

Even more problematic than urban population estimates for antiquity are estimates for subgroups of populations. Nevertheless, based on Coarelli's more conservative estimate for the number of Roman mithraea, and assuming that these mithraea supported an average membership of sixty, or ten to twenty more per mithraeum than is estimated for the typically smaller shrines,[4] the population of Roman Mithraists would have been approximately 41,000, or more.[5]

By contrast, only twenty-five Christian *tituli* are known in Rome by the fourth century, while the first Christian *basilicae* were pointedly built outside the walls of the city (Krautheimer 1980: 14). Cornelius, bishop of Rome in the mid-third century (251–253), provides the only statistic for estimating the number of Roman Christians. In a letter, which is cited by Eusebius (6.43.11), he reports that there are 154 Christian officials in Rome: Forty-six presbyters, seven deacons, seven sub-deacons, forty-two acolytes, and fifty-two exorcists, readers, and door-keepers: and more than "1500 widows and persons in distress." From these figures, Edward Gibbon estimates the number of Christians in Rome at 50,000 (Fox 1987: 268), while Richard Krautheimer speculates that the number at the time of Constantine may have approached 267,000 (Krautheimer 1980: 18). But even Gibbon's lower estimate has been judged too high (Fox 1987: 268). Such figures suggest only that the scale of the Roman Mithraic population was roughly comparable to that of Christianity; they suggest nothing, however, of any relationship which might have existed between the two groups based on relative size.

No visitor to Rome can ignore, however, the topographical observation that Mithraic sanctuaries, to the virtual exclusion of other cult sites, have been regularly discovered in proximity to historic Christian churches. The mithraea discovered in the excavations beneath S. Clemente and S. Prisca are well-known, and the most recent discovery, beneath S. Stefano Rotondo, has recently been published (Lissi-Caronna 1986). The Circus Maximus

mithraeum is actually located just behind the northwest end of the apse of S. Maria in Cosmedin, while that of Via Giovanni Lanza is similarly located just beyond the northwest end of the apse of S. Martino ai Monti. But what of those Roman mithraea which are in no proximity to any Christian site: the Mithraea of Caracalla or Barbarini, or all of those outside of the Aurelian walls, such as the Mithraeum of Marino and the numerous examples at Ostia?

John Schreiber has shown that second-century mithraea in Ostia were located solely in privately owned buildings, while those of the third century were located in public areas (Schreiber 1967: 38–40). Similarly, Coarelli has shown that Roman mithraea are located in or near such public or quasi-public spaces as barracks, baths, circuses, or offices of corporations (Coarelli 1979: 79), suggesting an official or quasi-official status for Mithraism by the third century. This increasingly public nature of third-century Roman Mithraism suggests no other significant interaction between it and Christianity than a competition of available real estate in the crowded, public areas of urban Rome by two recently introduced and rapidly expanding "eastern" cults.[6]

Those who view Mithraism and Christianity as fierce rivals have made much of a militant destruction of Mithraism by Christians at the end of the fourth century. In the mithraeum of S. Prisca, for example, the eyes of the figures in the frescoes have apparently been gouged out, the cult relief broken up, and the ruins filled with rubbish, presumably by the Christians of S. Prisca (Vermaseren and van Essen 1965: 241–242; Merkelbach 1984: 250). To argue from such evidence that Christianity was systematically anti-Mithraic, however, is akin to arguing that the Mithraic appropriation of an Etruscan tomb for its sanctuary at Sutri (later converted into the Church of S. Maria del Parto) demonstrates that Mithraism was anti-Etruscan.

The excavations under S. Clement, however, perhaps better indicate the fate of Roman Mithraism. Following the fire of Nero in 64 AD the remains of houses in the valley between the Coelian and Oppian hills had been covered over and became the foundation for two buildings: a brick *insula*, the courtyard of which was converted into a mithraeum during the second century; and a larger building across the narrow street, probably belonging to a man named Clement, later confused with Pope Clement. At the end of the first or the beginning of the second century, Christians began meeting in a room of

this larger house, and sometime between 313 and 384, the entire house was converted into a church. For this renovation, the ground floor was filled in and the area that was formerly the courtyard became the nave of the new church, while the first floor rooms were remodeled into the north and south aisles. Sometime after 395, the clergy of S. Clemente acquired the property across the street, which was still at the original ground level. The mithraeum in this building presumably had been abandoned by this time. As they had with their original building, the Christians filled in their new acquisition to the level of their church to provide a foundation for an apse, which was added to the rectangular church. In the twelfth century, this structure in turn was covered over to provide a foundation for the present structure (Boyle 1987: 6–12).[7] Rather than an intense rivalry resulting in destruction, the rapidly expanding Christian church in fourth-century Rome seems simply to have capitalized upon the misfortunes of their pagan neighbors in order to maximize their real estate holdings.

ii

The relation of Christianity to Mithraism, and to the other cults of Rome, can be charted more clearly by the events of the fourth century that culminated in the so-called "pagan revival" (Bloch 1945 and 1963 and Matthews 1973). In 382, the emperor Gratian officially broke with the policies of religious toleration which had been adopted by his predecessor Jovian (363–364) and Valentinian (364–375). He withdrew funds for the maintenance of the public cults and removed the Altar of Victory from the Senate, where it had been dedicated in 19 B.D. by Augustus. In August 383, Gratian was overthrown by Maximus, who set up an independent court in Trier, and Valentinian II succeeded Gratian, his half-brother, in Italy (382–392) under the protection of the German Arbogast. With the death of Gratian, the aristocratic defenders of paganism in Rome sought to consolidate their position.

The most articulate and powerful spokesman for paganism during this period were Q. Aurelius Symmachus, *praefectus urbis* in 384 and a relative of Ambrose, Bishop of Milan (374–397), and Vettius Agorius Praetextatus, *praefectus praetorio Italiae.* Symmachus is usually portrayed as a conservative

who championed the traditional Roman cults, while Praetextatus is presented as a champion of the ideals of Julian, the Apostate so-called, who championed a solar theology in support of imperial rule, and was an initiate in the Mysteries of Eleusis and, probably, in those of Mithras as well (Bloch 1963: 201–203; Matthews 1973: 179, n. 31 and 180). When Praetextatus died in 384, Symmachus, in grief, resigned as prefect and his cousin, Virus Nicomachus Flavanius, assumed leadership of the pagan party. Following the suspicious death of Valentinian II in May 392 and Arbogast's support of Flavius Eugenius as emperor, Flavianus became *praefectus urbix* in 393. He committed suicide in 394 following the defeat of Eugenius by Theodosius and of all hope for the pagan cause.

At the beginning of the fifth century, Macrobius wrote of Praetextatus in his *Saturnalia* that one of Praetextatus' fellow dinner guests:

> began to praise his [Praetextatus'] memory, another his learning, and all his knowledge of religion; for he alone, they declared knows the secrets of the nature of the godhead, he alone had the intelligence to apprehend the divine and the ability to expound it. (1.24,1; see also 1.7,17 and 1.11,1)

This passage closely replicates the observations of Praetextatus' wife, Paulina, preserved on Praetextatus' funeral monument, currently in the Capitoline Museum, on the virtues of her husband (Bloch 1945: 206–207).

In the *Saturnalia*, Macrobius presents an argument for solar theology which assumes an astrological rationale common to paganism generally but which he attributed to Praetextatus. Citing Cicero, he argues that the sun guides and directs the rest of the heavenly lights and presides over the planets in their courses. Just as the movements of the planets determine and thus forestall the sequence of human destinies, the sun, which directs the powers that guide our affairs, is the sovereign of all that goes on around us (*sat.*1.17,2).[8] The various activities of a single deity, therefore, are to be regarded as analogous to various divinities (*sat.* 1.17,3). Similarly, Symmachus argued in his Third *Relatio* that "all the different gods we worship should be thought of as one" (3, 10).

But paganism was not so homogeneous as Macrobius and Symmachus portrayed it (Robinson 1905: 87–89; Bloch 1945: 203). According to his funeral monument, Praetextatus not only championed the traditional Roman cults, as did Symmachus—the cults of Sol, Hercules, Liber Pater, and celestial

deities easily accommodated to the principles of solar theology—but the chthonic mysteries of Demeter and the cults of the so-called "oriental" deities as well: Hecate, Sarapis, the Magna Mater, and Mithras. As established by the archaeology and epigraphy of Ostia and Rome, the vast majority of pagans conformed to this example of Praetextatus in their dedication not only to the ancient Roman rites, but by their initiation and holding of sacred offices in "oriental" cults as well (Bloch 1945: 211, and his tabulation at the conclusion of his article).[9]

Official Roman piety could be articulated by any of these religious strategies. *Pietas* signifies right relationship to family, state, emperor, or cosmos. Symmachus, for example, speaks of the traditional cults as maintained by the "custom of your parents" (3.2), the "rites of the fathers" (3.3, 8, 9), the "love of tradition" (3.4), and the "rites of the empire" (3.7). The "oriental" cults, on the other hand, offered right relationship with the cosmos—however prior cosmic alienation might be understood. Recent research on Mithraism, for example, has decoded its central tauroctonous image, the portrayal of Mithras slaying a bull common to virtually every Mithraic find, as a cosmic image rather than the narrative event of transformed Persian myth assumed by Cumont's nineteen-century historicism. Its assemblage of conventional Graeco-Roman imagery is organized, according to this research, by the relation of astral constellations universally familiar from Hellenistic star maps.[10] Mithraism belongs to the widespread astral cults of late antiquity and witnesses to their popularity. It is this cosmic paradigm for terrestrial life which Mithraism shares with its pagan cousins (Gordon 1972: 96).

Mithraism combined the two cosmic dimensions of Roman paganism, at least formally: the celestial in its dedication to *Mithras Sol Invictus* (Figure 1.1), and the chthonic in its claims to be an "eastern" mystery. This alliance of officially recognized cosmic cults supported a parallel temporal rule of empire by supplying a universalistic ideological discourse in support of a cosmopolitan vision of empire modeled since Augustus upon Alexander's largely unrealized imperial vision. Already in 205/204 BC the Anatolian cult of Cybele had been brought to Rome by decree of the Senate. Marcus Aurelius and Commodus, in pursuit of the Stoic ideal of nature, had established imperial precedent for initiation in the Eleusinian Mysteries of Demeter (Martin 1986: n. 83). Reinhold Merkelbach has recently reemphasized that

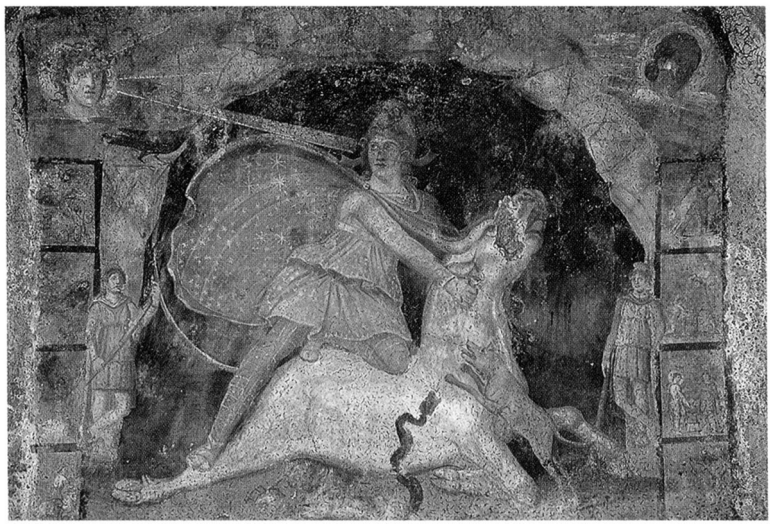

Figure 1.1 The Mithraeum at Marino.
Photo by L. Martin

Mithraism was essentially a "religion of loyalty" (Merkelbach 1984: 153–188). It provided "an economical aspect of social control" by its confirmation of the formal, authoritarian, and ritualistic social experience of its primarily military and bureaucratic adherents (Gordon 1972: 95). Although Mithraism "never acquired civic status of a place among the *sacra publica*" (Nock 1937: 108), it did fulfill "a traditional and highly conscious function of Roman religion for the important agents of Roman power" (Gordon 1972: 95).[11]

When Constantine restored the economic stability of the empire at the expense of the pagan populous (Rostovtzeff 1957: 522), he was no longer able to employ their solar theology as an ideological basis for empire and emperor.[12] As represented in Eusebius' famous account of Constantine's vision of the cross against the sun, the universal solar ideology of paganism became transformed into the universal theology of the Christians.[13]

As with paganism, fourth-century Christianity should not be viewed simplistically as a unified force standing firm against the pagan alternative. The bishops of Christianity faced in their domain the same problem as did the emperors: that of defining a basis for and maintaining the unity of their respective responsibilities. As Robin Lane Fox has noted, "the prime obstacle to Christianization was the Christians themselves" (Fox 1987: 666). A bewildering

array of claimants competed for Christian authority: the Donatists in Africa, the followers of Melitius in Egypt, the Arians in the East, the Valentinians in Rome, the Pelagians and the Manichaeans.

The successes of Roman Christianity initiated a redistribution of power from a network in which cult was inseparable from the state to a bifurcation of power in which state and religion reinforced one another. The result was the first state religion (MacMullen 1981: 132), a new ideological and institutional basis for Christian and, thereby, for imperial unity. This new distribution of power was first signaled by Gratian's refusal, at the urging of Ambrose, to accept the title of *pontifex maximus* in 379 (See Cameron 1968: 96–99). That refusal also signified that the worship of the old gods no longer affected the good of the state (Barrow 1973: 4–5). But this new bipolar distribution of power raised a new question of authority as well.

Representing the traditional order, Symmachus had argued to Valentinus II that the Altar of Victory should be restored to its place in the Senate as it was the "instrument of swearing loyalty to the emperor and to his laws and decrees" (3,5). It sealed the political authority of senatorial decisions as if acting under oath (3,5). Walter Burkert has shown that religion, morality, and political organization in antiquity had been indissolubly linked since the fourth-century BC teachings of Lycurgus (d. 324 BC), who held that "the oath is what holds a democracy together." Subsequently, the oath and its prerequisite altar became the basis for state and international law, as well as for civil and criminal law (Burkert 1985: 250–254). In asserting a religious basis for political authority, Peter Brown has concluded that the senators of Rome attempted to maintain an "Italian front" against Maximus in Gaul and Theodosius in the East. "In failing, they revealed not so much the weakness of their religion, as of their political position" (Brown 1961: 4).

Ambrose capitalized upon this setback to paganism by consolidating Christian power through his dealing with Theodosius. The massacre at Thessalonica and the public penance demanded by Ambrose of Theodosius in 390 is well known. But the precedent for this submission of Emperor to Bishop was established already in 389 as a result of the burning of a synagogue at Callinicum by Christians in December of 388. Theodosius ordered the Bishop of Callinicum, the instigator of the incident, to rebuild the synagogue at his own expense, to restore stolen properties, and to discipline those involved.

Despite the justice of this decision, and despite a compromised offered by Theodosius to rebuild the synagogue at state expense, Ambrose demanded that no reparation whatever be made to the Jews, either by Christians or by the state, and that the rioters not be punished. Theodosius yielded and cancelled the order. As F. H. Dudden concludes:

> This he did, not from weakness, nor on religious grounds, not because he was convinced by Ambrose's artificial pleadings, but from political necessity. Having only recently arrived in Italy, when his person was unknown and his authority not yet firmly established, he dared not take the risk of antagonizing [Ambrose] who had the power … of stirring up and setting in opposition to him the whole Catholic population. (Dudden 1935: Vol. II, 378)

The subsequent public penance successfully demanded of Theodosius by Ambrose following the massacre at Thessalonica formalized the new relation of power between Church and state. A clergy claimed the power to judge, condemn, punish, and pardon a monarch; a monarch submitted to spiritual authority which he recognized and publically acknowledged as higher than his own (Dudden 1935: Vol. II, 391). This principle is already articulated in Ambrose's letter to Valentinian written in response to Symmachus' petition:

> Just as all men under Roman rule serve you as emperor and lord of the world, so you, too, are a servant of the omnipotent God and his holy faith. (Ambrose XVII, I, trans. in Croke and Harries 1982)

The new consolidation of power in Christian hands at the conclusion of antiquity is exemplified by Ambrose's rhetorical question of Symmachus' petition: "if the old rites gave so much pleasure," then why did Rome turn to the rites of others: Venus, Cybele, or Mithras (Ambrose XVII, 30)? Ambrose replied to his own question by saying that everything since then has progressed for the better:

> So we, too, in youth have the feelings of childhood, with the changing years we also change and lay aside the childish things of our uniformed intellects. (Ambrose XVIII, 28)

With this allusion to Paul's first letter to the Corinthians (13:11), Ambrose championed a view of emperor and empire situated in a historical process. The

traditional cosmic paradigm of celestial and chthonic piety became located by Christians in the same history and understood either as past prophecies of Christian presence (e.g., by Lactantius; see Fox 1987: 659–661), or, more usually, as demonic survivals into a present (e.g., Justin, *i apol.* 9, 14, 25–26). Ambrose's point, again derived from Paul, is that the Christian is freed from such "elemental cosmic powers" (Gal. 4:3, 8–11) for a historical future—a view which only received its fullest expression in Renaissance thought.

iii

The difference between Christianity and Mithraism seemed to be encompassed by Christianity's understanding of a historical order of things as an alternative to paganism's cosmic understanding generally, rather than by any specific "rivalry" between the two. As Arthur Darby Nock concluded, with implicit reference to Renan's judgment:

> Suppose that Christianity had perished early, whether as a result of a consistent persecution or by being swallowed up in the general religious and cultural atmosphere of the time: we should not then have had a Mithraic world. We might have had a world in which Mithraism itself was the special devotion of a few but in which it had been otherwise absorbed in a solar piety. (Nock 1937: 113)

Thus Boyle's revisionist judgment minimizing any direct threat to nascent Roman Christianity is supported, but for reasons of theological orientation rather than those of population or proximity. Following the progressive Christianization of the army and the imperial court after Constantine, the Mithraic "religion of loyalty" lost much of its raison *d'être*. By the time of Theodosius' prohibitions of paganism during the final decade of the fourth century, Mithraism was dead.

2

Reflections on the Mithraic Tauroctony as Cult Scene

The study of Mithraism, like that of religion generally, has privileged the category of myth over ritual, that is, of modalities of ideation or belief over social behavior or action. Not the least interesting aspect of Mithraic studies has been its reflection of this bias in history of religions study. When Franz Cumont established the foundation for the modern studies of Mithraism with the publication of its extant data in the last decade of the nineteenth century (Cumont 1896, 1899), he interpreted these widely distributed, mostly material, remains from the historicist perspective of his era, as the effects of cultural diffusion. That which was dispersed, as comparative philology had argued, was the word— in the tradition of Romanticism, myth. In his "archaeological" summation of Mithraism, for example, Cumont could conclude, almost predictably, that:

> The basal layer of this religion … is the *faith* of ancient Iran … [upon which] was deposited in Babylon a thick sediment of Semitic *doctrines*, and afterwards the local *beliefs* of Asia Minor … Finally, a luxuriant vegetation of Hellenic *ideas* burst forth from this fertile soil. (Cumont 1903: 30–31, emphasis added)

Most students of Mithraism have continued to subsume both the data and their interpretation of the cult to their constructions of an assumed Mithraic narrative of mythic events, despite the "incoherence and absurdity" by which Cumont characterized his own reconstruction of Mithraic "doctrine," itself based on his imagined transformations of Persian myths (Cumont 1903: 147).

In Graeco-Roman antiquity, however, no Mithraic myth seems to have circulated, at least in public.[1] The public myths associated with the other mystery deities served their mysteries as propaganda, a form of recruitment

necessary for the survival of any social group, no matter how closed or exclusivist. This public information is by and large what contemporary observers of the mysteries, whether initiate or not, recorded, and what survives as the evidence for modern scholarship. The Mysteries of Mithras were an anomaly in this regard, as they were in others.

The perceptions of Mithraism, according to literary evidence from Herodotus to Pallas, associated Mithras not with myth, but with rituals of sacrifice (sacrifice *to* Mithras: Herodotus 1.131, Strabo 15.3; sacrifice *taught by* Mithras: Plutarch Is. et Os. 46; sacrifice *in the name of* Mithras: Plutarch *Pom*. 24–25, Pallas in Porphyry, *de abstin*. 2.56). Observers of ritual, R. A. Rappaport has written, "in their eagerness to plumb man's dark symbolic or functional depths, to find in ritual more than meets the eye, … [have] tended to overlook ritual's surface, that which does meet the eye. Yet it is on its surface, in its form, that we discern whatever may be peculiar to ritual" (Rappaport 1979: 174). And, unless one is prepared to defend the unlikely argument that the Mithraic tauroctonous reliefs and frescoes were prepared solely or even preeminently by initiate artists,[2] what met the eye of Roman antiquity when it gazed upon the Mithraic tauroctony was an iconic composition that could have been seen only as a depiction of ritual sacrifice (Figure 2.1).

Figure 2.1 Mithraic tauroctony from the "Mithraeum of the Circus Maximus," Rome
Photo by L. Martin

In his survey "Mithraism since Franz Cumont," Roger Beck notes that recent astronomical interpretations of the Mithraic tauroctony, the cult scene that has been central to any construction of Mithraic myth, "challenge the standing assumption that [it] is to be read first and foremost as an event in a mythic story. Instead they imply that it is to be read as a map—a map of the heavens" (Beck 1984: 2081, see also 2097–2098). "That is," he concludes, "more satisfactory, and certainly much simpler than any account in terms of narrative myth" (Beck 1984: 2082). This recently decoded character of the Mithraic tauroctony as a celestial star-map further redirects constructions of the basis for Mithraic membership away from narrative reconstructions of mythic acts performed by an epiphanic deity and suggests consideration of this image as a synchronically displayed system, represented in a scene of ritual sacrifice. While local, or even regional, commentaries undoubtedly emerged in words as in picture, accounting, for example, for the non-uniform sequence of side-scenes when present (Gordon 1980a: 200–227), the ubiquitous tauroctony seems to have provided the underlying structure for a catholic Mithraism.[3] The Mithraic representation of sacrifice constituted, in other words, a "focalization" for the "shared orientation" of a Mithraic culture (Sperber 1975: 136–137).

Since the publication of Walter Burkert's *Homo Necans* (1983) and René Girard's *La violence et le sacré* (1977), theorists of religion have increasingly turned their attention to ritual, especially that of sacrifice. Although Jonathan Z. Smith has cautioned against simply inverting "past [theoretical] valences" (J. Z. Smith 1987: 191), these theorists approach ritual as itself a primary datum rather than as "a secondary manifestation of spiritual belief," the enactment of an "antecedent idea" that, if known, might provide the key to such derivative behavior (Burkert 1987: 156). As Rappaport has observed of ritual generally, "it becomes apparent through a consideration of [its] form that ritual is not simply an alternative way to express certain things, but that certain things can be expressed only in ritual" (Rappaport 1979: 174).

John Hinnells suggested in 1971 that Mithraism was "a cult more concerned with practice than with precept" (Hinnells 1975: 354). Given the discussion generated by Burkert and Girard and by a subsequent symposium on sacrifice by affiliates of the Paris Center for Comparative Research of Ancient Societies (Detienne and Vernant 1989), it is remarkable that only a handful of Mithraic scholars have followed Hinnells' lead, perhaps because he linked

the Mithraic "cultic or ritual" scene with a myth of cosmogonic sacrifice derived ultimately from Iran (Hinnells 1975: 305–312), a position about which he now professes "some degree of doubt" (personal correspondence, September 16, 1989). Reinhold Merkelbach, following the theory of Burkert, has interpreted the *Stieroper* with reference to the Mithraic hunting scenes as a ritual transformation of the primordial hunt (Merkelbach 1984: 4, n. 2), "the oldest organized male collective" (Merkelbach 1984: 4). Robert Turcan has described how the Mithraic portrayal of sacrifice differs from standard Graeco-Roman sacrificial practice, not only in its performance by the god himself, but in a number of ritual details (Turcan 1981: 341–380). Richard Gordon, on the other hand, has most recently interpreted the Mithraic sacrifice as a commentary on civic sacrifice that generated an enigmatic rather than political truth (Gordon 1988: 67). Despite their suggestive insights into the Mithraic tauroctonous image as sacrificial act, all of these analysts finally subsume their interpretation of this scene to their construction of a prior mythic event: Hinnells to an "idea of salvation" (Hinnells 1975: 311–312), Merkelbach to a Mithraic teaching derived from Platonic philosophy about the destiny of the soul (Merkelbach 1984: Ch. 9), Turcan to a "*mythe de foundation*" (Turcan 1981: 344), and Gordon, to the mythic establishment of a "transit-point between the two worlds … [of] Here and There" that is ritualized only in the Mithraic feast (Gordon 1988: 68). Even Beck has argued that this image must admit, *a priori*, "of one or more of three interpretations: cosmogonical, sociological, or eschatological, the three broad categories that constitute the traditional religio-phenomenological typology of myth" (e.g., Haekel 1960: 1268–1274; Widengren 1969: 157–171). Tellingly, Beck made these remarks in the subsection of his article that he entitled the "myth and meaning" of the tauroctony (Beck 1984: 2079).

These interpreters of the Mithraic sacrificial scene continue to assume an earlier tradition of ritual studies in which sacrifice was understood as a response by *Homo religiosus* to that which is "totally other," whether nature or deity, a theological privileging of "being before manifestation," of "logos before praxis," or "myth before ritual" (Mack 1987: 2). Marcel Detienne has argued that such a notion of sacrifice, like that of totemism, is an artificial, arbitrarily constructed type—"a category of the thought of yesterday" (Detienne 1989: 20).

One obvious factor for the persistence in assigning the Mithraic tauroctony to a mythic charter scene for subsequent Mithraic practice, apart from the inertia of previous scholarship, is that a ritual sacrifice of bulls was not actually practiced in the Mithraic cult. Though sacrifice may refer to actual rites in some contexts, theorists of ritual emphasize rather the paradigmatic "sense" of sacrifice for social construction (Burkert 1987: 150; Mack 1987: 28). Those social principles which are embedded in rituals generate forms that may be systematically captured (Lawson and McCauley 1990: 139, see also 50). I should like to suggest that the tauroctonous image of ritual sacrifice that so dominates Mithraic culture is, at least in part, a formulation of its social principles.

Jonathan Z. Smith has argued, in exception to the general theories of ritual advanced by Burkert and Girard, that the social significance of rituals such as sacrifice must be related specifically to what real people are about (Mack 1987: 58). In the collective "reality" of antiquity, those sets of practices or beliefs that are assigned by modern perceptions to an autonomous category of "religion" were embedded in what we perceive to be other sorts of social and power relations.[4] The relationship between the Mithraic portrayal of a violent act of blood sacrifice and the primary business of the military combatants who constituted at least a notable portion of Mithraic demography and who accounted for a significant distribution of Mithraic cult sites (Daniels 1975: 249–274) may be explored as a case in point.[5]

Warfare, according to classic military theory, has two purposes: the domination of one well-organized group by another and the defense of that which has been conquered (Henderson 1905, cited from the *Encyclopaedia Brittanica* 1911, Vol. 28: 305). As expressed by Plato:

> If we are to have enough pasture and plough land, we shall have to cut off a slice of our neighbor's territory … [and] the next thing will be … that we shall be at war … This will mean a considerable addition to our community—a whole army … in defence of all this property. (*resp*. 2.373D-E, trans. Cornford 1958)

Like Heraclitus before him, Plato considered such strife to be part of the natural order, and foreign enemies to be "natural enemies" (*resp*. 5.470B).[6] He considered that conflict among kindreds, on the other hand, should not

be considered war (*resp*. 5.470B). By this principle, the Mithraic brotherhood, a fictive kin group in service to the authority of a cult "Father" (Gordon 1972: 101), would be encouraged to channel their professional violence solely toward an external enemy.[7] In Girard's view, culture generally, and especially a military culture, involves the displacement of mimetic rivalry to a hierarchical pattern of dominance, and finally to a unanimous victimage (Girard 1987: 126, 128), a mechanism of transference that empowers political propaganda (Girard 1987: 140).

Whether the Mithraic slaying of the bull is to be understood as derived from a hunting death, as Burkert and Merkelbach would argue, or as a portrayal of the displacement of human violence, as the theory of Girard would suggest, either, in the view of Richard Gordon, "are merely two aspects of a wider domination of the natural world" (Gordon 1988: 64; also Gordon 1972: 96). The world of nature is mastered, according to Smith, by ritual which imaginatively superimposes "the controls of the home environment" (Mack 1987: 57). "Ritual takes place," for Smith, "according to a mental map" that reflects "actual territory inhabited." The locus of the Mithraic scene of sacrificial dominance in the spelaean representation of the cosmos, together with the cosmic structure of the tauroctony itself, accord well with the mandate of the Roman military to maintain the *pax romana* throughout those territories dominated by Roman power.[8]

No less important than conquest and domination, at least for the Roman military during the "Mithraic period," was its task of domesticating those barbarians who had been subdued.[9] As the guarantor of social order, the Roman army was the main agent for introducing Romanization into the liminal regions of the empire (Webster 1985: 269, 274; Schutz 1985: 24). The resulting provincial culture, like the place of sacrifice, was a locus of controlled or domesticated dominance.[10]

Like sacrifice everywhere, the Mithraic tauroctony depicts the slaying of a domesticated animal. Its image of violent domination, the selective cultivation (*colo; cultura*) of both animals (*boukolēsis* or husbandry) and plants (agri*culture*), reflects a culture of domiciliation that resides precisely upon those conquered "pasture and plough lands" for which Plato justified war (Smith 1987: 191–256; Detienne 1989: 8).

In the zoological taxonomy of ritual, domesticated animals occupy a place between wild animals or nature, on the one hand, and man or culture, on the other (J. Z. Smith 1987: 201), even as wheat occupies a similar transactional taxon in the world of plants.[11] Sacrificial rites, therefore, are the counterpart to the cultivation of grain (Vernant 1989: 36). Rather than any dramatic consequence of cosmogonic drama, the enigmatic ears of wheat sprouting from the tail of the Mithraic bull may be viewed as a confluence of this ambiguity of violence. Perhaps this correlation of violence and cultivation is the basis for the seemingly universal inclination of soldiers, as claimed by Ramsey MacMullen, to become farmers (MacMullen 1967: 1).

The sacrificial relationship between animal and cereal food clarifies the alimentary practice of the Mithraic cult (Kane 1975: 313–351; Detienne 1989: 9; Vernant 1989: 37). Vernant argues that:

> Eating cultivated domestic plants and sacrificed domestic animals are the feature of a dietary regimen that … determines the conditions of [one's] particular existence. (Vernant 1989: 38)

And, according to Plato, "sacrificial feasts … with seats of honor, meats and cups brimful" are to be the reward for a successful military existence (*resp*. 5.468E). From the theoretical perspective of ritual, the cult meal, too, must not be understood as the consequence or enactment of a sacrificial drama, but as the alimentary simulation of the sacrificial system, as the Mithraic reversible reliefs graphically contrive.

The most prominent subsidiary figure of the Mithraic tauroctony is the dog, an animal which inhabits man's camp and protects his herds (Detienne and Svenbro 1989: 180), and which is the domestic double of the wolf (Detienne and Svenbro 1989: 150), an animal-emblem of a warlike world (Detienne and Svenbro 1989: 149). The dog, like the wolf, which bleeds its prey to death (Detienne and Svenbro 1989: 154), is the double of the sacrifice (Detienne and Svenbro 1989), as the dog's dominant position opposite Mithras with respect to the bull in the tauroctony, and as Mithras' companion in the Mithraic hunting scenes, indicates.

Only the serpent joins the dog in consuming the blood of the bull. The snake, a familiar emblem of the "other," whether of untamed nature

or of transcendent deity (Hinnells 1975: 296–298), similarly represents the antinomy between culture and nature mediated by the domesticated blood of the sacrificial bull, and is, thereby, a second iconic counterpart to Mithras and the dog. The scorpion, whose sting is fatal to the bull, may, too, be seen as a systemic counterpart of Mithras. Like the untamed serpent, its symbolism belongs both to nature and to deity, and to animal and plant fertility (Hinnells 1975: 290–300). Its position on the tauroctony at the genitals of the bull is in iconographic juxtaposition to the ears of grain sprouting from the bull's tail.

The images which make up the tauroctony as ritual scene may thus be considered as "polyvalent," not according to some pleonastic fantasy whereby any one may finally be identified willy-nilly with any other,[12] but carefully structured, as Beck has argued in his paper, by a "series of opposed or complementary … pairs" (Beck 1994: 33).[13] Their significance, in other words, is established only with respect to their relational position with that system formally captured by the tauroctonous image.[14]

Whatever might be the astrological or the metaphysical import of the Mithraic tauroctony, its stylized and standardized image of ritual sacrifice represents an apt formalization and focalization for a Mithraic military culture. Just as Beck implies that his interpretation of the tauroctony as a route-map through the fixed stars may be appropriate to the senior initiatory grade of *Heliodromos* (Beck 1994: 41), my interpretation may be more important to the lower grade of *Miles.* As cosmic image, the tauroctony invokes, on this level, the universal sphere of Roman political and military aspirations. As sacrificial scene, the tauroctony portrays the generative matrix for a society whose existence is defined by a technology of domination and domestication. As the *abatteur* and harvester who has mastered the selective killing necessary to husbandry and agriculture, Mithras is established as a culture-bringer in the tradition if Triptolemus, Dionysus, Osiris, and Orpheus.[15] The imaginal act of controlled violence by this imagined figure generates and focalizes one basis for a catholic Mithraic cult(ure),[16] all observed from within the tauroctonous scene itself, but from a position notably detached from its ritual action, by the raven, the domesticated bird that mediates between both man and beast and between man and deity, and is the emblem for the initial grade of Mithraic membership (*Corvus*) (Gordon 1980b: 26–33).

3

The Roman Cult of Mithras: A Cognitive Perspective[1]

Almost two decade ago (December 1996), I gave two lectures at Masaryk University entitled "Biology, Sociology and the Study of Religion," sponsored by the Institute for the Study of Religions and the Czech Society for the Study of Religions, and subsequently published in *Religio* (1997). In these lectures, I argued for the study of religion as a natural phenomenon—a project now comprehensively proposed by the American philosopher Daniel Dennett in his recent book *Breaking the Spell* (2006). I illustrated my own proposal from Hellenistic religions, my area of historical expertise. While suggesting the importance of the cognitive sciences and the neo-Darwinian evolutionary framework they generally presuppose, I focused, at that time, more on sociology than on biology for the study of religion. I should like now to correct that imbalance with a brief discussion of the Roman cult of Mithras that is informed by a cognitive perspective.

The historical problem

The Roman cult of Mithras is documented from the end of the first century AD and over the next 300 years spread widely throughout the Roman Empire—from Italy and Gaul, to London and Hadrian's Wall in Britain, along the Rhine River in Germany to the eastern limes of the empire in Syria and to those south in Northern Africa. Although a profusion of archaeological remains from this cult have been, and continue to be, discovered, primarily Mithraic sanctuaries and cult images, the historiographical problem is that no literary evidence for Mithraism survives. Research on the Roman cult, consequently, has focused largely on reconstructing a presumed Mithraic myth in ways that might

conform to the surviving material evidence. More recent research, however, has focused on that material evidence itself (Beck 1984), and especially on its astrological symbolism (Beck 1988; Ulansey 1989). This recent research is still concerned, however, with a view toward reconstructing a Mithraic myth that might, in turn, be "demythologized" to reveal a theological system assumed to be encoded therein (Martin 1994; Clauss 2001: 11). As this assumption was already formulated in the nineteenth century by the archaeologist Charles William King, "There is no doubt but that … [Mithraic imagery], if it could be interpreted, would be found to contain a complete summary of the Mithraic creed" (King 1866: 340). But what if Mithraism had no commonly held and transmitted creed, or even a narrative myth, to be reconstructed? In 1990, I suggested this might well be the case (Martin 1994 [Chapter 2, this volume]; also see Burkert 1987: 69). But having made this somewhat rash suggestion, I was at a loss as to how to proceed any further in the study of this cult.

In the same year that I made my suggestion, the German historian Manfred Clauss published a book on Mithraism that offered a clue (Clauss 1990; Eng. trans. 2001). Mithraism, Clauss contended, is "an example of the primacy of images in the ancient world" (Clauss 2001: 17). Scholars of such religions, he argued, "tend to understand [such] mythological and religious images primarily as allegorical guises for conceptual claims. But in ancient religion," he continued, "images, or rather the ways in which people perceived images, were based on a quite different psychology. They were apprehended directly … .In all likelihood, such images did not need to be explained conceptually" (Clauss 2001: 11–12). Despite his important insight, however, Clauss nevertheless retained the view that "the Mithraic cult-reliefs depict a sacred narrative" (Clauss 2001: xx), for which he ventured his own rather detailed reconstruction (Clauss 2001: 62–101).

I found Clauss' claim about the imagistic character of Mithraism, and of ancient religions in general, particularly intriguing in light of an "imagistic mode of religiosity" described in 1995 by the British anthropologist Harvey Whitehouse in explanation of his ethnography of the Mali Baining of East New Britain, Papua New Guinea (Whitehouse 1995: 193–221, elaborated in 2000, 2004). First World religious practices, such as those described by Whitehouse, have long been familiar to comparative historians of religion as sites for thinking about religion, including those of the Graeco-Roman world. Some

seventy-five years ago, for example, Raffaele Pettazzoni noted morphological parallels between the initiation rites of the Greek mystery cults and those of some Australian tribes (Pettazzoni 1924: 21–44). And forty years ago, Maarten Vermaseren, one of the great scholars of Mithraism, suggested that certain features of the Roman cult might be found among what he then termed "the primitive peoples" of contemporary Australia, Africa, and America (Vermaseren 1963: 129). Neither Pettazzoni nor Vermaseren offered, however, any theoretical basis for making these ethnographic analogies nor, to my knowledge, has any other scholar; Whitehouse has.

Whitehouse modeled the "imagistic mode of religiosity" on a ritualistic revival group that emerged among the Baining settlements of Dadul and Maranagi. In Whitehouse' description, this modality is characterized by a diversity of precepts and practices based on local knowledge that is associated with small-scale, face-to-face groups, and that is transmitted through infrequently performed rituals, especially initiation rites—traits of social organization and ritual practice which seem to accord with what is known of Mithraism.

In a comprehensive theory of divergent "modes of religiosity," Whitehouse contrasts this "imagistic mode of religiosity" with a "doctrinal mode" that is associated with the widespread affirmation and transmission of a commonly held set of beliefs which are narratively expressed and cogently argued. The stability of these widespread but often complex set of beliefs and teachings are authorized and maintained by some centralized authority and controlled through frequently repeated verbal practices such as instruction, sermonizing, or exegetical study.

The doctrinal model of religiosity was modeled by Whitehouse on the Pomio Kivung, a relatively stable cargo cult that is especially characteristic of those groups in Papua New Guinea which have been influenced by Western missionaries and which Western scholars are most familiar with from their own cultural context. This cultural context of Western scholars has tended to bias them toward understanding all religions as types of belief systems, as seems to have been the case in attempts to comprehend the non-Christian Hellenistic religions. On the basis of my earlier suggestions about the non-doctrinal character of Mithraism, I shall argue that Roman Mithraism is best understood as representative of an "imagistic" mode of religiosity as

that modality has been described by Whitehouse, and by the frequency and character of the ritual practices associated with that mode.

The two "modes of religiosity" proposed by Whitehouse rely on, and are constrained cognitively by, differential systems of human memory in terms of which the two forms of religious knowledge are transmitted. The universal dynamics of these panhuman systems of memory provide the theoretical basis for comparisons of human behaviors and practices across time and space.

Mithraic practices

Relatively little is known about the ritual practices of Mithraism except that admission to the group involved initiation rites (Gk. = *mystêria*) and that its membership seemingly participated in communal meals, apparently in commemoration of their initiation (Clauss 2001: 113). The latter is attested by *triclinia*, or "eating-couches," along the two side walls of virtually every mithraeum—and from iconography in some mithraea showing members of the community sharing a meal, together with scenes showing Mithras sharing a meal with Sol (the sun) while sitting on the hide of a bull (see Chapter 4). This tauroctony is the sole image common to all Mithraic cult sites.

But it was initiation into membership, by definition performed but once by any initiate (or once upon his initiation into each of the differentiated grades of initiation), which set Mithraism apart from official Roman religion—as it did from other of the Hellenistic mysteries. In contrast to rituals that are frequently repeated and which tend, consequently, to become routinized, such infrequently performed rituals are typically characterized by a high degree of pageantry and sensory arousal. These rituals, which in some contexts are associated quite literally with life-threatening ordeals (Whitehouse 2000: 23), are termed by Whitehouse "rites of terror" (Whitehouse 2000: 18–33). This is precisely the description that has been employed by commentators, both ancient and modern, to characterize Mithraic initiation (e.g., Lamprocl. *Com*. 9; Boyle 1987: 70).

The painted scenes of initiation on the walls of the Mithraeum of Capua Vetere in southern Italy give some idea of the dramatic ordeals with which Mithraic initiates were threatened (Vermaseren 1971: 24–42). In the first of

these scenes, an initiate is depicted as bound and naked, as menaced by sword and by fire, and as undergoing a symbolic death, according to Vermaseren (1963: 132), or an execution, in the interpretation of Clauss (2001: 103). Similarly, in an initiatory scene on a cup recently discovered in a mithraeum in Mainz (Horn 1994), the initiating Father is aiming an arrow from his drawn bow directly at the initiate who is portrayed as smaller, naked, and vulnerable (Beck 2000: Plate XIII). Such scenes recall Tertullian's description of Mithraic initiation as a "mimicry of martyrdom" (*de cor*. 15.4).

The third and fourth panels of the Capua Vetere scenes of initiation are damaged and the scenes portrayed there obliterated (Vermaseren 1971: Plate XXIII), but the final panel of these scenes shows the initiate with his blindfold removed (Vermaseren 1971: Plate XXV). This ritualized emergence into light out of the ordeals of initiatory darkness recalls the epitome of Eleusinian initiation by the fourth-century Greek philosopher Themistius. At first, he writes, the initiate wanders

> through the dark as one uninitiated: then come all the terrors before the final initiation, shuddering, trembling, sweating, amazement: then one is struck with a marvelous light, one is received into pure regions and meadows, with voices and dances and the majesty of holy sounds and shapes. (Preserved in Stobaeus 4; cited by Mylonas 1961: 264–265)

The sensory disorientation wrought by an abrupt emergence from darkness into light, by the "holy sounds" of the cult ritual, the sudden sounding of a gong by the Hierophant of Eleusis in summons of Kore (Clinton 1992: 86 and n. 128), for example, or the rattling of sistras by Isaic initiates, together with the unfamiliar and exotic "shapes" of the cult iconography, would have established in the initiates a cognitive disorientation that would have rendered them more susceptible to the reception of the cult objectives (Turcan 1996: 112, also 108).

Although charges of brandings (Tert. *de praescr. haeret*. 40) and worse (from the sixth century, Nonnus, *In Julianium imperatorem invectivæ duæ*, in Migne, *PG* 36: 989; and from the eighth century, Cosmas of Jerusalem, in Migne, *PG* 38: 506) were made of Mithraic initiation practices by Christian apologists, the actuality of such extreme ordeals has been questioned (Beskow 1979). In any case, according to a suggestion by Aristotle, it was

the psychological effects consequent upon the anticipation of terrifying ordeals and not necessarily their actuality that characterized initiation into the mysteries (Arist. *fr.* 15, and *apud* Synesios, *orat.* 48; see Burkert 1987: 69, 89). Perhaps portrayals of rites of terror, as in the Capua Vetere Mithraeum or on the Mainz Mithraic cup, represented iconic strategies for heightening the psychological effects of an initiates' impending initiation (Buckley 2000: 176). As some scholars have concluded with respect to the Eleusinian rites, "[i]nitiation in the Mysteries … apparently did not involve [any] instruction of a dogmatic nature, but was rather a process of internal transformation, founded upon the emotional experiences of [what was represented as] a direct encounter with the divine" (Zaidman-Pantel 1992: 139).

It is the panhuman effects of initiation and not so much the various acts associated with their performance—and certainly not any purported corpus of teachings—that allows us to relate Mithraic initiation practices to those of the other Hellenistic mysteries as well as to those of the contemporary cults in Papua New Guinea. In all of these cases, a "clearly defined social group" is constituted by passage through shared initiatory "rites of terror" rather than by any instruction in and adherence to a set of beliefs held in common (Allen 1967: 5–6). Initiatory "rites of terror" establish, in other words, "an expression and an experience of solidarity" unlike that produced, or even articulatable, by any discursive practice (Whitehouse 1995: 112, 126). It is the trenchant memories of such shared rites that forge a particular collective identity and provide the basis for its maintenance and transmission.

Initiation, memory, and social maintenance

At the beginning of the last century, Maurice Halbwachs argued that collective memory is central to the identity and maintenance of any group (Halbwachs 1980, 1992). His work initiated a number of insightful studies that explored how ideologically shaped images of identity are employed in the construction of a commemorated past. But Whitehouse's theory turns rather on the cognitive functions of individual memory—on how "universal features of human memory, activated in different ways, might be said to mould political organization and ideology" (Whitehouse 2000: 5, 11).

Since the work of Halbwachs, psychologists have described a complex system of human memory in which short-term or working memory is distinguished from long-term memory, which is, of course, key to the maintenance and transmission of any collective identity. Long-term memory is, in turn, divided into procedural memory, a learned but relatively unconscious sort of memory associated with, for example, riding the proverbial bicycle, as well as an explicit memory of learned materials that are subject to more or less ready recall. The main point for this discussion is that explicit memory is further differentiated into semantic or encyclopedic memory and episodic or autobiographical memory (Tulving 1972; for a good overview of recent research on memory, see Schacter 1996; but see Edelman 1992, esp. 238). Semantic memory refers to the ability to recall mental representations of a general, propositional nature that have been learned and reinforced through repetition. Episodic memory, on the other hand, refers to the ability to recall the circumstances of personally experienced events, especially momentous events that become conceptualized as unique experiences in one's life. In such memories, the time and place of the event, together with the identity of co-participants, are part of the representation (Whitehouse 2000: 5, 113, *apud* Tulving 1972). In contrast to the repeated and routinized learning which encodes semantic memory, it is this episodic memory system that is activated by the sorts of portentous initiation rites documented by anthropologists working in Papua New Guinea and by historians of the Hellenistic mysteries.

A particularly salient type of episodic memory has often been referred to as "flashbulb" memory. This is a memory that results from participation in some particularly traumatic or catastrophic event (Brown and Kulik 1982; Whitehouse 2000: 119–121; McCauley and Lawson 2002), and that seems to be associated especially with the abrupt and overwhelming sentience that is characteristic of many initiation rites. From among the Hellenistic mysteries, for example, I might mention such ritually contrived analogues to the "flashbulb" metaphor as Apuleius' report of Isiac initiates witnessing "the sun flashing with bright light" "in the middle of the night" (*met*. 11.23), or Plutarch's reference to initiates being startled on the night of the mysteries by the Eleusinian Hierophant's sudden appearance in a brilliant light out of the darkness of the Telesterion (Plu. *mor*. 81E; also Hipp. *haer*. 5.8.40 = *ANF* 5.3).

It has recently been suggested that the term "flashbulb" may be somewhat misleading and that what is important in such memories is less the accuracy of recall than the special episodes or enduring benchmarks they represent for an individual (Neisser 1982). In the words of one psychologist of history, "[t]hey are the places where we line up our own lives with the course of history itself and say 'I was there' " (Simonton 1994: 70). Of course, in the cosmically oriented Hellenistic world, initiation into the mysteries lined up initiates not with the course of history but with the course of cosmic order.

Isiac initiation was further described by Apuleius as preceded by a period of fasting (*met*. 11.23), as was participation in the Eleusinian night of the mysteries (Mylonas 1961: 258–259)—a somatic deprivation common to initiation rites that would heighten their sensory effects and contribute to their "episodic" character. Although there is no direct evidence of preparatory fasting in Mithraism, some scholars assume such was the case (Cumont 1903: 160; Vermaseren 1963: 136). Similarly, the employment of masks apparently during initiations as well as subsequently during the communal meals (Kane 1975: 344) would also heighten episodic recall among fellow initiates and reinforce their sense of fellowship and solidarity. As Whitehouse concludes, the "cognitive shocks" produced by initiatory "rites of terror" and subsequently commemorated in analogous and emotionally heightened practices during celebratory rituals establishes and sustains those "enduring episodic memories upon which solidarity and enduring face-to-face relationships" are maintained (Whitehouse 2000: 12; also Atran 2002: 164).

Cognitive basis for the sociopolitical features of Mithraism

Because of the number of mithraea that have been discovered, along with a profusion of inscriptions, mostly dedicatory (Beck 2000: 178, n. 158; Clauss 2001: xxi), more is known of the sociopolitical features of Mithraism than is known of its practices. With few exceptions, mithraea are small, able to accommodate no more than twenty to thirty people. This, together with the relatively large estimates of still undiscovered sites, presumably with similar proportions (Martin 1989: 2–6, *apud* Coarelli 1979), suggests that Mithraism originated and remained organized as relatively small, face-to-face groups (Clauss 2001: 105). Such closely bonded, exclusive communities, most often

structured by claims of fictive kinship—Mithraic groups are presided over by "Fathers" (Martin 1997; for Mithraism, Vermaseren 1963: 129)—are typically resistant to rapid and widespread diffusion, as are natural kin-groups. If such communities do spread, they do so slowly and inefficiently through contagion (Mensching 1976: 101), by which one group either splits into two, or comes into contact with some other group which it regenerates in more or less its own form, and that group generates another, and so forth, in a "chainlike process of transmission between contiguous populations" (Whitehouse 2000: 49, 77; see Sperber 1996: 1–7, 25–27, 57–61; Boyer 2001: 46–47). Whitehouse suggests, in other words, that the dissemination of such groups was through "strings of contact" rather than through missionaries with their verbally or textually articulated "strings of logically connected dogma" (Whitehouse 2000: 14, 36, 37).

Although Mithraic cells were widely distributed throughout the Roman Empire, their rather rapid dissemination can be attributed to sociopolitical factors other than the "religious" character of the Mithraic groups themselves. Even as the mobility of Egyptian merchants and immigrants facilitated the spread of the Isis cult (Heyob 1975: 10–12), so the mobile character of the Roman military and of its civil servants, both of which dominated the demography of Mithraic membership, provided the "strings of contagion" for the spread of Mithraism (White 1990: 56, and literature cited in n. 117). Maps portraying the density of distributed Mithraic finds, and their overlap with the deployment of the Roman military and consequent Roman bureaucratic outposts, more resemble epidemiological maps of the spread of disease (a la Sperber 1996) than they do unconnected deployments of religious missionizing.

Although a common story would certainly be shared within any particular Mithraic cohort and some regional homogeneities may have developed among contiguous Mithraic groups (Clauss 2001: 16, 48, 71, 76), it is nevertheless unlikely that any standardized accounts of Mithraic myth or teachings circulated widely. As Whitehouse concludes, "[e]ven when a set of non-verbal ritual images" does spread widely, as was the case with Mithraism, their "verbal accounts … may not" (Whitehouse 2000: 49). As is often the case with traditional systems of initiation, there are "strict taboos (backed by formidable sanctions) against the verbalization of religious revelations" (Whitehouse 2000: 54). As I have argued elsewhere for the Hellenistic mysteries generally,

such "prohibitions on idle chatter about sacred cult activities amount to something rather different from what is usually meant by the term 'secrecy' " (Martin 1995; Whitehouse 2000). Rather, as Whitehouse suggests, "[r]estricting access of exegetical discussion has the effect of insulating the intense, autobiographical quality of imagistic revelations from the 'noise' or 'interference' of everyday discourse" (Whitehouse 2000: 92). For Mithraism, in other words, as for Graeco-Roman religions in general, there were no roving apostles or missionaries who represented and transmitted some centrally approved or orthodox set of beliefs – rather authority "inhered in the collective act rather than in the words of the leader" whose role was more of an iconic figurehead than one of "dynamic social strategist" (Whitehouse 1995: 153).

Mithraism and Christianity

Mithraism has been compared to Christianity since the second century, by Justin Martyr (*i apol*. 66; *dial*. 70, 78), by Tertullian (*de bapt*. 5; *de cor*. 15; *adv. Marc*. 1.13; *de praescr. haeret*. 40; *apol*. 8) and by Origen (*Cels*. 1.9; 6.21). Modern comparisons include the famous judgment by Ernst Renan in the nineteenth century that had "the growth of Christianity … been arrested by some mortal malady, the world would have been Mithraic" (Renan 1882: 579). However, Mithraism, like other non-Christian Roman religions, effectively came to an end with the embrace of Christianity by the Roman state during the fourth century. This political ratification of Christianity does not adequately explain, however, the basis for its acceptance as an alternative to existing Roman religions and philosophies in the first place (see Lease 1980).

The rather rapid transmission of Christianity throughout the Roman Empire and its broad-based popular appeal may be explained by the adoption by some of the early Christianities of what Whitehouse terms the "doctrinal" mode of religiosity. In the Hellenistic context, Christianity shared this mode of religiosity only with some forms of Judaism, the proselytizing transmission of which, however, was incapacitated by Roman suppression following the Jewish revolts of 66–70 and 132–136.

The foundation for what later developed as the Christian mode of doctrinal orthodoxy was first articulated by Paul with his insistence

that salvation is not to be obtained through ritual practices but by faith (Rom. 1: 16, 17; 3: 26, 28, 30, etc.). The "doctrinal" character of this "faith" is nowhere more clearly expressed than in Paul's opposition to the "charismatic" practices of the Christian community in Corinth (1 Cor. 12). Paul insisted that such spiritual practices, and especially glossolalia, be regulated by reasoned interpretation (1 Cor. 14: 5, 13–15). And he leaves little doubt that it is his own authority that is to be the universal criterion for a correctly reasoned interpretation to which local revelations associated with such practices as glossolalia should yield. For *his* teachings, he asserts, are themselves "a command of the Lord" (1 Cor. 14: 37). "If anyone does not recognize this," he concludes, "he is not recognized" (1 Cor. 14: 38) and can "go to hell" (Gal. 1: 6–9).

As is characteristic of the doctrinal mode of religions generally, the dynamic and centralized leadership advocated by Paul, as developed in the deutero-Pauline traditions, tended to suppress alternative imagistic modes of Hellenistic religiosity—Christian as well as non-Christian. Indications that other early Christian groups may have shared an imagistic mode of religiosity with their Hellenistic religious context are suggested by the collection of local "aphorisms" and "picturesque images" ascribed to Jesus in *Q* and in the *Gospel of Thomas* (Mack 1993: 105; on the "local" character of these sayings, see Arnal 2001). Whereas *Q* became assimilated into the "orthodox" gospel narratives of the Matthean and Lucan traditions, *Thomas* became judged as "heretical" and rejected from the orthodox literary tradition. The material evidence for pre-Constantinian Christianity (Snyder 2003) nevertheless supports the continuing existence of an imagistic modality among many Christian groups into the early fourth century (and beyond) when the doctrinal tradition achieved authoritative status as the dominant mode of Christian self-understanding and hegemonic expression.

Conclusion

Whitehouse's cognitively based theory of two "modes of religiosity" predicts that religious transmission will select for differential relationships between discursive and non-discursive types of ritual practice, between the particular

memory systems activated by these differing types of performance, and between a consequent patterning of sociopolitical association. This theoretical prediction is historically instantiated by the parallel rise of Mithraism and Christianity, which were cognitively encoded and transmitted in just these contrasting ways. The early successes of Christianity with respect to Mithraism can, in other words, be explained more on the basis of its selected mode of representation and strategy of transmission than by any presumed content of its message (Whitehouse 2000: 80). The latter is, after all, largely shared with many of the mystery cults in general as has been observed throughout the ages—the product of a common cultural context and of contemporaneous cultural concerns (e.g., Smith 1990: esp. 166–143). As Whitehouse contends, "control of the social conditions of transmission is always more important than determining the range of textual materials that should be regarded as authoritative" (Whitehouse 2000: 177). This conclusion was demonstrated, of course, by the growing power of a centralized "orthodox" Christianity and its condemnation of "deviant" forms of Christianity as heretical—whether those forms were characterized by imagistic practice or by doctrinal nonconformity (Martin 2004).

The appealing feature of cognitive-based models, such as that proposed by Whitehouse, for the historical and comparative study of religion is that they incorporate but go beyond the familiar metaphors, typologies, and sets of concepts previously developed on the basis of ethnographic, historical, and sociological descriptions (Whitehouse 1995: 203–217; 2000: 3–4). Rather, cognitive models advance theoretical explanations grounded in common features of human cognition and offer, thereby, a transcultural and transhistorical premise for the organization and interpretation of human behavior and thought, and of their historical remains (Whitehouse 2000: 11; see Stark 1996: 25–26).

4

Ritual Competence and Mithraic Ritual

There must in the nature of human institutions be a mental language common to all nations, which uniformly grasps the substance of things feasible in human social life and expresses it with as many diverse modifications as these same things may have diverse aspects… This common mental language is proper to our Science, by whose light… scholars will be enabled to construct a mental vocabulary common to all.

Giambattista Vico

i

In 1741, Johann Peter Süssmilch, a Prussian clergyman and founder of the principles of modern statistics, argued that the logical perfection of grammar demonstrated its divine origin (Süssmilch 1741; Graf 1996). While Süssmilch's argument by design was opposed to contemporaneous views that language was a human invention, his trope of divinity supported Vico's conviction of its ubiquitous uniformity (Vico 1744: 161).[1] Warrant for Vico's conviction about a fundamentally natural and "mental" language common to humanity, albeit with the potential for diverse historical expressions, awaited Noam Chomsky's distinction between linguistic competence and linguistic performance (Chomsky 1965). This distinction between an intuitive structure for language and its use moved linguistic theory into the emerging field of cognitive psychology. The cognitive endeavor to write a grammar for the "common mental language" of human beings pursued by Chomsky has been employed by E. Thomas Lawson and Robert N. McCauley to formulate a theory of religious ritual competence (Lawson and McCauley 1990; McCauley and Lawson 2002). They invite researchers, especially ethnographers, to

assess their theory "to see if… [it] will stand up to further tests" (Lawson and McCauley 1990: 176–177; McCauley and Lawson 2002: 37). The issue I should like to explore here, however, is to what extent the Lawson and McCauley theory of ritual competence and the hypotheses about religious ritual form predicted by this theory are "proper" to the historiographical "science" envisioned by Vico.

Although a cognitive science of religion had been proposed in 1980 (Guthrie 1980) and Lawson and McCauley had launched such a study with their cognitive theory of ritual competence in 1990, to my knowledge, Thomas Lawson was the first to challenge historians to recognize the relevance of cognitive science for their study of religion. In 1994, Lawson observed that:

> Historians have often been only too willing to assign the problem of the persistence of… [religious] notions to psychologists, anthropologists, philosophers, theologians, or, in desperation, the therapeutically inclined.

They do so, he concluded:

> at the expense of recognizing that *if they are willing to make assumptions about the transmission of tradition, then it is their job to help in identifying the mechanisms which underwrite such a process.* (Lawson 1994: 483)

Lawson argued, in other words, that history is not an *explanans* but must be the *explanandum*; it is precisely the "emergence, development and persistence" of particularistic historical ideas and practices that beg for explanation (Lawson and McCauley 1993).

The relentless problem of all historiography is its instantiation of the logical fallacy of affirming the consequent, that is, that the truth of the antecedent may be argued from the truth of the consequent, for all historiography proceeds, by definition, as a reconstruction of past events (and causes) on the basis of surviving historical remains. As I have argued elsewhere, the appealing feature of cognitive models is that they go behind the familiar metaphors, typologies, or sets of concepts—themselves based on descriptions of historical remains—to advance theoretical explanations for historical formations that are grounded in universal features of human cognition (Martin 2002: 31).

Following Dan Sperber's contention that macro-scale phenomena must be understood as the collective outcome of processes at the micro-

level (Sperber 1996: 64), Lawson and McCauley argue that their theory of religious ritual competence identifies one of the underlying micro-processes that motivates the development of religious ritual systems and affects their historical arrangement in ways that increase the probabilities of their continued transmission (McCauley and Lawson 2002: 43, 179). Explicit instruction concerning religious rituals, they argue, "is, at least sometimes, completely absent and about which, therefore, participants must have some form of intuitive knowledge." Knowledge of those forms is revealed by the acquisition of and successful participation in rituals (2002: 4–5; 1990: 2–3), and, they presume, by the researches of the cognitive sciences. By attempting to write a cognitive grammar of religious ritual form, Lawson and McCauley propose to describe a common human structure that historians might employ to sort out surfeits of historical data where they may exist, on the one hand, and to fill in the gaps where there is a deficiency of data, on the other. By doing so, they offer probabilistic constraints on the fallacies that can be concluded from an anomic positing of historical possibility. To employ such models in historiographical reconstruction assumes, of course, their validity. The assessment of the validity of Lawson and McCauley's model of religious ritual form is currently an ongoing project by historians as by anthropologists (Vial 1999; Martin 2005). Assuming a heuristic validity for the model is itself another form of assessment if employment of that model, in consideration of the greatest amount of available historical data, is able to produce a plausible account of past occurrences in the absence of credible alternatives.

ii

> Mithras, God of the Morning, our trumpets waken the Wall!
> Rome is above the Nations, but Thou art over all!
>
> —Rudyard Kipling

The Roman cult of Mithraism flourished throughout the Roman Empire from the end of the first until the end of the fourth centuries AD when it, like all non-Christian religions, came under the interdictions of the Christian emperor Theodosius. Because of its transcultural distribution and transgenerational persistence, Mithraism can offer a significant case study for

the history of religions in late antiquity. Although no texts, myths, or sets of doctrine have survived from Mithraic sources,[2] a profusion of archaeological remains, architectural and iconographic, have been discovered at numerous sites throughout the expanse of the Roman Empire, attesting to a rich ritual life among Mithraists. Inferences made about the exact character of Mithraic ritual from these data are, however, inconclusive and often contradictory (Beck 2000: 145). Mithraism can, therefore, also provide a relevant case study for assessing the historiographical implications of Lawson and McCauley's theory of religious ritual form.

For Lawson and McCauley, participants' cognitive representations of religious rituals utilize the same cognitive system as that employed in the representation of any action (McCauley and Lawson 2002: 115). Religious rituals, in other words, are actions like any human action and, like any human action, they require agents, both actors and those acted upon or "patients" (McCauley and Lawson 2002: 23). What differentiates religious rituals from ordinary, non-religious, actions is, in the theory of Lawson and McCauley, the "principle of superhuman agency," that is, the commitment by participants to roles played by culturally postulated superhuman agents (CPS-agents) in their representations of religious rituals (Lawson and McCauley 1990: 61, 124–125; McCauley and Lawson 2002: 8). It is the different "roles that CPS-agents play in rituals' representations" that differentiate types of religious ritual (McCauley and Lawson 2002: 26).

CPS-agents are conceived as powerful agents that "serve as the guarantor of cosmic (as opposed to conventional) authority in religious systems" (McCauley and Lawson 2002: 22). There is no question that the central CPS-agent of Mithraism is Mithras. A depiction of Mithras slaying a bull (the tauroctony), represented on frescos or, more commonly, on carved reliefs, is the only imagistic feature common to all Mithraic finds.

The elements of this tauroctonous scene—a raven, a dog, a serpent, a scorpion, even the bull itself—have been identified with empyrean constellations (Corvus, Canis Minor or Major, Hydra, Scorpio, Taurus). The tauroctony is often flanked by images of the sun and the moon and/or is sometimes bordered by the twelve signs of the zodiac. Mithras' "cosmic authority" is confirmed, in other words, by the superimposition of his image in the act of slaying the bull upon a map of the heavens (Beck 1998: 125)—

although the exact significance of this cosmic act remains unclear. We might venture the general observation, however, that the tauroctonous image, in the context of Graeco-Roman popular mentality, dominated as it was by astrological/astronomical significations, was almost certainly a Mithraic representation for negotiating the terrestrial world, widely perceived among Graeco-Roman philosophies and religions as ruled by chance (Gk: *tychē, heimarmenē*; Lt: *fortuna*), in light of an alternative cosmic order personified and guaranteed by Mithras (Martin 1987, esp. 113–118). Lawson and McCauley predict that participants in a particular ritual system will consider that such (soteriological) changes in their religious world are brought about through transactions with such CPS-agents as Mithras (McCauley and Lawson 2002: 14–15), and this transformation is most clearly exemplified in the Mithraic rite of initiation.

Mithraic initiation

For Lawson and McCauley, initiation rites generally are examples of "special agent rituals" in which either the CPS-agent or his/her surrogate is considered to serve as the actor in the ritual. A surrogate for the CPS-agent is defined by the comparative immediacy of his/her ritually mediated relationship to the CPS-agent (McCauley and Lawson 2002: 26, 33). This "principle of superhuman immediacy" refers to the number of enabling rituals, that is, those antecedent rituals "whose successful completion is necessary for the completion of the current ritual" (McCauley and Lawson 2002: 116), required in order to connect the ritual agents with the CPS-agent (Lawson and McCauley 1990: 125; McCauley and Lawson 2002: 27). Such rituals, which involve appeal to fewer enabling actions in order to implicate a superhuman agent, are considered to be the more central in a religious system (Lawson 1994: 493; Lawson and McCauley 1990: 125; McCauley and Lawson 2002: 27).

The "Father" (*Pater*) of any particular Mithraic community and the highest grade of Mithraic initiation was the ritual agent most immediately related to Mithras in the cult's ritual structure. In an apparent depiction of Mithraic initiation on a cup discovered in a mithraeum in Mainz (Horn 1994; Beck 2000), the initiating agent is portrayed as wearing a Persian cap (Beck: 2000 Pl. XIII), the symbol of the "Father" according to the symbolic

representations of the seven grades of initiation depicted on the mosaic floor of the Felicissimus Mithraeum in Ostia (*CIMRM* 299) and part of the distinctive garb worn by Mithras in all of his representations. This "immediacy" of the Father to Mithras is obtained as the consequence of his ritually "ascending" the initiatory "ladder" described by Celsus (Origen, *Cels*. 6.22) and portrayed in the grade mosaic of the Felicissimus Mithraeum: a progressive, sevenfold series of enabling rituals themselves presided over by an antecedent Father in a chain of authority. As Lawson and McCauley predict, this chain of authority extends back to some founding act by Mithras himself, at least implicitly, the genealogy of which remains unclear.

The Father, the agent ritually most closely connected to Mithras, clearly acts in a way that effects a change in the initiate's religious status; upon initiation, the initiate is henceforth considered to be initiated (McCauley and Lawson 2002: 13), that is, to be a Mithraic "insider" (McCauley and Lawson 2002: 15). This change in religious status wrought by special agent rituals is, according to Lawson and McCauley, considered to be "super-permanent," as is characteristic of initiation rituals generally (Lawson and McCauley 1990: 134), and is, consequently, a ritual performed but once by any initiate (or once by any initiate per grade of initiation).

Special agent rituals, according to Lawson and McCauley, typically involve high sensory pageantry and a consequent emotional response on the part of participants which contributes to the memorability of these one-time rituals (McCauley and Lawson 2002: Ch. 2; see Martin 2005). In the scene depicted on the Mainz vessel, for example, the initiating Father aims an arrow from his drawn bow directly at the initiate who is portrayed as smaller, naked, and vulnerable (Beck 2000: Pl. XIII). The "terror of the scene" (Beck 2000: 150) recalls that of the scenes of initiation in the Mithraeum of Capua Vetere where the initiate, also portrayed as naked, is menaced by sword and fire (Vermaseren 1971: 24–42; on "rites of terror" and initiation, see Whitehouse 2000: 18–33, and Chapter 3, this volume).

According to Lawson and McCauley, the "high emotion" associated with initiation rituals triggers a "cognitive alarm" that "tends both to marshal and to focus cognitive resources on its apparent causes, which, if vindicated by subsequent developments, marks the events as especially memorable and ones that mark potentially significant events in their lives (McCauley and Lawson 2002: 188, see 77–85), a highly desirable strategy for a central but non-repeated

ritual" (McCauley and Lawson 2002: 113; for an extended discussion of this aspect of Mithraic initiation, see Martin 2005).

Since special agent rituals are, in the predictions of Lawson and McCauley, central to the religious system, they are, consequently, unlikely to involve any kind of formal variation or substitutions (McCauley and Lawson 2002: 33). Not surprisingly, Mithraic initiation remains the most consistently documented of all Mithraic rituals.

The Mithraic meal

In addition to initiation into membership, it is also clear that the Mithraic communities held communal meals. A meal is portrayed in extant Mithraic imagery more often than any other scene apart from the tauroctony (e.g., *CIMRM* 390, r5; 693a; 782, 1175; Stewardson and Saunders 1967: 68). And, a feature common to virtually every mithraeum was the *triclinia*, or "eating-couches," along its side walls (Figure 4.1). In the architectural iconography of the mithraeum, the lateral "eating couches" flanked and framed the ubiquitous tauroctonous image of Mithras, which was always displayed on the third or back wall—the place that, in a domestic dining room, would often be occupied by a third "*clinium*".

Figure 4.1 Mithraeum of the "Seven Spheres," Ostia
Photo by L. Martin

Table protocol in the Hellenistic world assigned or accorded places at the table according to social position. Plutarch reports that the position at the center of the three-table configuration was reserved especially by Persians as the place of royal or highest honor (Plu. *mor*. 619 B), precisely the position where the tauroctonous image of Mithras was situated in all mithraea. As Manfred Clauss concludes, the Persian god Mithras "himself was always the host" of the Mithraic meal (Clauss 2001: 113). In fact, several tauroctonous reliefs have been discovered which are reversible to show a scene of Mithras "hosting" the meal (e.g., *CIMRM* 397, 641, 1083, 1137, 1896) and these apparently were displayed during the meal itself. The frequency with which the meal was depicted in Mithraic imagery, the ubiquity of the *triclinia* as a dominant architectural feature of mithraea and the centrality of Mithras' iconic presence at the meal all support a conclusion that the meal was a regular feature of Mithraic life (Clauss 2001: 61).

But was this meal a ritual at all, or simply an iterated religio-social act by a group that has been characterized as primarily a "*Religion der Loyalität*" (Merkelbach 1984: viii, 153–188)? Were the Mithraic meals, in other words, simply occasions at which Mithraists came together in fellowship as was common to religious and social associations of the period generally (Beck 1996: 182; Kloppenborg 1996: 25–56; Wilson 1996: 12)—a fraternal act celebrated in the presence of and/or with their patron deity that rendered "visible the fact that whose who take part are members of one and the same group" (Kane 1975: 348–350; Clauss 2001: 113)?

In the technical sense employed by Lawson and McCauley, religious rituals, in contrast to religious acts, "are actions in which an agent does something to a patient" (McCauley and Lawson 2002: 13). Can, in other words, the Mithraic meal be described in terms both of agents who act and are recipients of that action and, if so, who/what were they? Since the Pater and the Heliodromus, the ritual surrogates of Mithras and Helios,[3] are depicted as presiding over the meal (e.g., *CIMRM* 1896), might it have been a component of the rites of initiation as is, in other contexts, often the case (Stewardson and Saunders 1967: 68; Clauss 2001: 113)? But when participants in the Mithraic meals were portrayed, they are masked, indicating an (antecedent) grade of initiation (e.g., *CIMRM* 483, 1896). The meal could not, therefore, have been an initiation rite for which the participants in the meal were acted upon, that is, in which they

were the patients or the recipients of the ritual act, since they were already initiates. Rather, the meal was clearly an act in which the role of agent was played by initiates who consumed a meal, the patient/object of the action. For the Mithraic meal to qualify as a religious ritual in the technical sense employed by Lawson and McCauley, therefore, the elements of the meal itself must have been thought of as having some sort of ritual connection with Mithras, the CPS-agent that would have rendered it the patient/object of the act of eating by participant/agents.

Lawson and McCauley term rituals in which "the most direct connection with the gods" is through the patient/object of the ritual, "special patient rituals" (McCauley and Lawson 2002: 26). In this type of ritual, the role of CPS-agents is "typically passive" and their "presence in the ritual less vital." By this interpretation, the presence of Mithras at the meal would have been less that of presiding host and more that of honored guest. "[S]ince it is not the … [CPS-agents] who have acted, these rituals' effects are not super-permanent. Consequently … they must be repeated at periodic intervals" (Lawson and McCauley 1990: 135), as the Mithraic meals seemed to be. The *triclinia* as the central architectural feature of mithraea, the portrayal of Mithras' honored presence at the communal meal and of his own participation in the meal together with Helios all argue for the conclusion that the Mithraic meal was a special patient religious ritual.

Special patient rituals "are invariably connected with other rituals" (McCauley and Lawson 2002: 15), that is, with other "actions in which CPS-agents play a role" (McCauley and Lawson 2002: 13). What was the ritual connection of Mithras to the elements of the meal? Does, in other words, Mithras' tauroctonous presence at the meal define in some way the object of the participant's action? Were, for example, the elements of the Mithraic meal understood to have been (symbolic) sustenance of some sort provided by Mithras, as suggested by some portrayals of Mithras as hunter (Merkelbach 1984: 3–6)? Or, since Mithras and Helios were themselves often depicted as sharing a meal while sitting on the hide of a bull (e.g., *CIMRM* 42.13, 49, 483, 835.2, 966.C5, 988, 1036.2, 1082.2), presumably the bull that is portrayed as being slain in the omnipresent tauroctonous scene[4] might the meal's sustenance have been the meat of the bull—or that of some smaller, substitute animal more appropriate to the exiguous space

available for the performance of ritual in most mithraea (Kane 1975: 350; on substitutions as a formally permissible characteristic of special patient rituals, see McCauley and Lawson 2002: 32)?

As I have argued elsewhere, the Mithraic tauroctonous image could only have been viewed in the larger context of Roman religiosity as a depiction of ritual sacrifice (Martin 1994: 218) and public perceptions of Mithraism, according to literary evidence from Herodotus to Pallas, did associate Mithraism with sacrifice, albeit in different ways: sacrifice *to* Mithras (Hdt. 1.131; Strab. *geog*. 15.3), sacrifice *taught by* Mithras (Plu. *Is. et Os*. 46), and sacrifice *in the name of Mithras* (Plu. *Pom*. 24–25, Pallas, cited in Porph. *de abst*. 2.56) (Martin 1994: 218 and n. 5 [Chapter 2, p. 22, this volume]). Was, in other words, the Mithraic meal a sacramental act, having something to do with salvation, analogous in some sense to the contemporaneously developing Christian meal (Justin, *i apol*. 66; Tert. *de praescr*. 40; Vermaseren 1963: 103–104; Stewardson and Saunders 1967: 71; Beck 2000: 175)? Or was the sacrificial character of Mithraism an "outsider's" misperception of Mithraic imagery?

Although it remains unclear exactly what the connection between Mithras and the meal or the elements of the meal might have been, participants in the meal would in all probability have concluded by analogy from Mithraic architecture and imagery that such a connection existed. (On the analogic encoding and transmission of knowledge in Mithraism, see Martin 2005.) It is nevertheless clear that any "ritually mediated connection" of Mithras to the meal (the patient/object) was "comparatively less intimate" than was the case of Mithras to the Father/actor in the Mithraic initiation. By contrast to the "super-permanent" change in status wrought by initiation, such "ritually less-well-connected" rituals as the meal carry comparatively less finality. As such, their repetition was necessary to maintain the ritual's efficacy (McCauley and Lawson 2002: 31). And since the objects of special patient rituals are comparatively more removed from the CPS-agent by enabling rituals than are special agents, they "often display greater latitude about their instruments, their patients, and even their procedures" (McCauley and Lawson 2002: 32). Consequently, even within the same community the nature of the Mithraic meal might have been either sacramental or fraternal (Beck 1996: 182), with its precise character subject to local or regional variation.[5]

The answer to such questions depends, of course, on the role(s) of Mithras (the CPS-agent) and the connection of Mithras to the possibilities of ritual

agents that are postulated in the particular conceptual systems of Mithraism. Lawson and McCauley's religious ritual form hypotheses address the structure of rituals and predict, therefore, nothing of their historical, that is, semantic and social contents (McCauley and Lawson 2002: 9–10). What the Lawson-McCauley hypotheses do predict, however, is that special patient rituals are repeated, that they become, as a consequence, more routinized than special agent rituals and that they involve comparatively less pageantry—and this seems fairly to characterize the Mithraic meals. The Mithraic meals constituted, in other words, what Robert Turcan has termed the "liturgie ordinaire" of the Mithraists (Turcan 1993: 78, and cited by Beck 2000: 146).

The Mithraic procession of the Sun-Runner

Roger Beck, one of the foremost scholars of Mithraism, has recently described a third, processional Mithraic ritual (Beck 2000). Beck reconstructs this ritual primarily on the basis of the second scene portrayed on the Mainz Mithraic cup (Beck 2000: Pl. XIV), from a passage about Mithraic cosmology preserved in Porphyry's *de antro nympharum*,[6] and from the universal design of mithraea as a "likeness" (*eikona*) of the cosmos.[7] This diverse documentation suggests that the ritual—assuming the validity of Beck's reconstruction—was widely, if not universally, practiced (Beck 2000: 157). In a complex but convincing argument, Beck concludes that this ritual was an enactment of a solar drama in which the *Heliodromus* ("Sun-Runner"), escorted by two figures representing Cautes and Cautopates (see n. 5) and preceded by an initiate of the grade "Miles" (Beck 2000: 157),[8] led a processional miming the solar journey (*dromus*) around the aisle of the mithraeum,[9] itself a "scale model" of the cosmos, intimating, thereby, the genesis and soteriological apogenesis of souls (Beck 2000: 159; 163–164). Beck concludes that "[t]he enactment of this mystery … is precisely the business of Mithraists meeting in their mithraeum" (Beck 2000: 163).

The question, of course, is to what extent Lawson and McCauley's hypotheses are helpful in determining the formal type of the Mithraic processional and, consequently, its relationship to Mithraic initiation on the one hand and to the Mithraic meal on the other. This question again revolves around a determination of who occupied the role of agent and who that of the recipient of the action of this ritual. The answer will determine

whether the processional was a didactic component of or a soteriological complement to Mithraic initiation.

On the one hand, Beck argues that the processional presents a "doctrinal truth" (Beck 2000: 157) and, as such, is an "integral part of the mithraeum's rites of initiation" (Beck 2000: 159). By this interpretation, the processional would be a special agent ritual, led by the *Heliodromus*, the surrogate of Helios, who acts through didactic ritual to instruct new initiates in the central cosmic presumptions of Mithraism. As such, we would expect this ritual to be performed but once per new initiate (although those already holding an initiatory grade would likely have witnessed and even participated in the ritual multiple times thus reinforcing—as in the case of initiation—its didactic import).

On the other hand, and also by Beck's reconstruction, it is the initiates who are the agents of the ritual, traveling through the "scale model" of the cosmos on a "metaphorical journey" which mimes "within their mithraeum … the [cosmic] destiny of [their] souls" (Beck 2000: 160). As this cosmic destiny leads the initiates beyond the celestial spheres of the cosmos toward the "ideal world" (Beck 2000: 168), it would seem as though it is Mithras who, as representative of this ideal world, would be the welcoming recipient of a soteriological act on the part of initiates. By this interpretation, the processional would be a special patient ritual in that the object/patient of the ritual would be the CPS-agent himself, or his surrogate, the Father, who is otherwise absent from the depiction of the procession on the Mainz cup.

The Mainz cup shows that Milites or initiates of at least the third grade of initiation, were participants in the procession. But were the two grades of initiates inferior to Miles, the grades of Raven and Nymphus, also participants in the procession as actors or were they participants as patient/recipients of the ritual act? And, although the leader of the ritual, the Sun-Runner, is represented as the sixth of the seven Mithraic initiatory grades and is, therefore, "ritually less-well-connected" to the CPS-agent than is the Pater, the Sun-Runner is, as we have seen, also portrayed in Mithraic imagery as an alternate surrogate of Mithras (see n. 3).

We might conclude that the ritual form hypotheses of Lawson and McCauley confirm Beck's contention that the Mithraic processional

was an important part of Mithraic business. While not an initiation rite *per se*, the Mithraic procession would, however, seem to have been a special agent, didactic ritual complementary to Mithraic initiation—as the two complementary scenes on the Mainz cup suggest—in which a "ritually less-well-connected" leader, together with "ritually less-well-connected" agents, initiates of the grade of Miles or higher, might well have performed the ritual for the instructive benefit of those less ritually well-connected, the Ravens and Nymphae. Although non-repeatable with respect to new initiates, initiates of the second grade, Nymphus, and higher would have observed this ritual repeatedly—as in the case of initiation—whereas those of the third grade, Miles, and higher, seemed also to have been frequent participants in this ritual as well. In this way the information conveyed by these rites concerning Mithraic "salvation" would not only be introduced to new initiates but would also be reinforced among the membership of the group (Barth 1975: 101). This relationship of the roles of patient/audience characteristic of the total sequence of initiations, including its attendant processions, would have provided a certain balance between memorability and didactic reinforcement within a Mithraic ritual system.

The Mithraic ritual system

We can conclude that the Mithraic ritual system included both special agent rituals (initiation, the procession of the Sun-Runner) and special patient rituals (the Mithraic meal).[10] The distinction between initiation and the procession of the Sun-Runner as special agent rituals, on the one hand, and the Mithraic meals as special patient rituals, on the other, is, of course, significant. According to Lawson and McCauley, the ratio of special agent to special patient rituals makes up any particular ritual system's complement of rituals (McCauley and Lawson 2002: 181). An unbalanced system, in which there is a bias toward one type of ritual form over the other, will be short-lived even if widespread (McCauley and Lawson 2002: 198), for special agent rituals alone require increasingly greater expenditures of resources (with decreasing effect) in order to ensure the high levels of sensory pageantry associated with the cognitive and transmissive efficacy of such rites while the repetitive nature of special patient rituals tend toward habituation, tedium and, finally, irrelevance

(McCauley and Lawson 2002: 185). A "balanced" ritual system, on the other hand, contributes to the stability and survival of religious systems. The felicitous balance of the Mithraic ritual system, both within the special agent rituals themselves and between special agent and special patient rituals, offers one explanation for the widely distributed, 300-year ascendancy of Mithraism.

Nevertheless, it was the special agent rituals of (graded) initiation(s) and the complementary procession of the Sun-Runner that dominated the Mithraic ritual system and that the special patient ritual of the meal seemed to reference. Whereas initiation remains the most clearly and consistently documented feature of Mithraism and seemed to be a universal Mithraic practice, Mithraic special patient rituals apparently were variable, subject to regional variation in both form and practice. The Mithraic special agent ritual and its didactic processional complement were, in other words, the more stable and influential of the two ritual forms. Such special agent rituals are dominant in imagistic systems whereby religious knowledge is transmitted through imagery and performance, whereas special patient rituals are dominant in doctrinal systems whereby religious knowledge is transmitted through well-formulated instruction (Lawson and McCauley 1990: 125).[11] It now seems clear that Mithraism was a system in which its knowledge was analogically encoded and transmitted through its iconic and performative imagery. On the other hand, Mithraic doctrine, belief, or even myth seemed to be a matter of regional or even local exegesis, if they ever existed at all (Martin 2005). Finally, it can be suggested that the ratio of special agent rituals to the special patient rituals in the Mithraic ritual system, and that between imagistic and doctrinal modes of transmission (Whitehouse 2000), was less balanced than was that of Christianity as it emerged from the fourth century.[12]

iii

> In the signs of religion and the laws of salvation form necessarily prevails over essence…
>
> —Anatole France

When Abbot Maël, the purblind missionary of Anatole France's satire of Western civilization, *Penguin Island*, mistakenly baptized a colony of

penguins, a surprised assembly of the saints met in paradise to consider the ritual's validity. Following on their learned disputations, they concluded that "the validity of a sacrament solely depends upon its form" (France 1975: 38). And so it is for Lawson and McCauley but, as we have seen, for reasons quite other from those of claims to superhuman authority. Lawson and McCauley's theory of ritual competence emphasizes that theoretical generalizations about rituals cannot be made on the basis of culturally contingent meanings and interpretations but only upon the formal syntax of religious ritual actions that are structured by the way in which the human cognitive system represents any action generally (McCauley and Lawson 2002: 10). From our brief attempt to assess the utility of Lawson and McCauley's predictions concerning religious ritual form for historiographic research, we might suggest several conclusions about our case study, the place of ritual in the Roman cult of Mithraism.

1. It comes as no surprise that Lawson and McCauley's predictions about special agent rituals are confirmed by what is known of the Mithraic rite of initiation. This is largely because common formal features of initiation/entry rituals have already been widely documented by ethnographic and historical evidence.[13] These predictions also strongly suggest that the Mithraic procession of the Sun-Runner was, as reconstructed, a special agent ritual.

2. Lawson and McCauley's ritual form hypotheses do, however, allow us to differentiate special agent from special patient rituals and to conclude, thereby, that the Mithraic meals were, in the technical sense of Lawson and McCauley's hypotheses, not special agent or initiatory rituals but special patient rituals.

3. The identification and differentiation of the forms of the Mithraic rituals allow us further to identify a relationship among Mithraic rituals whereby the repeated special patient rituals related to and referenced the super-permanent effects of initiation. This relative stability of the Mithraic ritual system, as defined by the comparative balance of its forms, contributes to considerations about the appeal of this movement in late antiquity that provide an alternative to conclusions about the attractiveness of Mithraism based on questionable reconstructions of Mithraic teachings. The content of Mithraic teachings, of their significance or meaning—which all evidence indicates was a regional or even local characteristic of Mithraism—is, of course, postulated by its various conceptual systems and is beyond the pales of the formal analysis of religious ritual addressed by Lawson and McCauley.

Lawson and McCauley's cognitive theory of religious ritual competence and their hypotheses about religious ritual form highlight the formal ways in which the concept of agency and the roles attributed to agency have been represented by subjects in the conceptual systems of particular religious groups. And they have offered historians a cognitive model for differentiating the formal conditions whereby representations of certain action conditions in the historical data might be attributed to roles occupied by particular agents but not to others, and to which performative role these representations of certain actions might be attributed. As one noted historian of religion has recently concluded, "not everything that is subjective is also arbitrary" (Kippenberg 2002: 189).

5

The Ecology of Threat Detection and Precautionary Response from the Perspectives of Evolutionary Psychology, Cognitive Science, and Historiography: The Case of the Roman Cults of Mithras

I … choose to blame … complexity on reality— though it is of course possible that we just do not understand everything well enough to find the hidden simplicity.

Michael Tomasello (2008: 319)

It is the simplicity that underpins complexity … [which] makes life possible.

John Gribbin (2004: xxi)

Introduction: A scientific history of religions

In *Turing*, his "novel about computation," the Berkeley computer scientist Christos Papadimitriou describes the problems faced by contemporary attempts to explain—or even to describe—the complexities of human history from the perspective of the evolutionary and cognitive sciences. "Imagine," Papadimitriou writes:

> billions of agents, each with his little experiences and preferences and presumptions and aspirations, each with millions and millions of neurons that tell him what to do, what to expect, how to react. (Papadimitriou 2003: 164)

Papadimitriou's conjecture emphasizes both the difficulty of explaining the acts of innumerable agents throughout human history as well as the neuronal

complexity underlying each of these agent's behaviors. "How do you make a theory out of that?" he asks. Papadimitriou proposes:

> you have to make simplifying assumptions, isolate a small part of the problem, focus on a few key aspects of the situation, perhaps grossly exaggerate some things, and ignore the rest. And then you may prove an interesting theorem. (Papadimitriou 2003: 164)[1]

The interesting theorems arrived at through such simplifications can then be modeled by computer simulations or explored by controlled laboratory experimentation, and may thus identify patterns of human behavior previously unnoted by historians, while confirming or disconfirming those that have been (e.g., Turchin 2007: 262–266). Both of these approaches serve to constrain and to control the elaborate explanations often proposed by overly exuberant historians, as well as to identify behavioral dispositions beyond the purview of historical inquiry.

But you have to remember, Papadimitriou concludes, that the value of such interesting theorems "is delimited by the extent to which your assumptions are reasonable, [i.e., that they] capture the essence of a given … situation" (Papadimitriou 2003: 164). That is to say, the patterns identified by computer simulations or experiments, necessarily based on "simplifying assumptions" about human behaviors, should have *external* validity as well; they should, in other words, resemble patterns observed in "given situations" throughout the expanse of human history—"in the field," as it were. As Simon Baron-Cohen has counseled, any scientific findings that "have been confirmed to occur in the present" must, if valid, also "have occurred in the past" (Baron-Cohen 2011: 110). And, computer simulations or experimental results can be judged "reasonable" only if they contribute to explanations of specific historical and ethnographic circumstances—that is, if they are confirmed by, as well as contribute to, generalizable explanations of what real people in real-life situations actually do. In this way, the work of evolutionary and cognitive scientists and that of historians must be complementary. Whereas the evolutionary and cognitive sciences can provide new and previously unnoticed possibilities for framing historical investigations, historians may, in turn, identify relevant real-world variables that have escaped the simplifying and "presentist" biases of contemporary experimentalists.

My goal in this study is to explore activations and exaptations of evolved, biologically based threat precaution systems (Boyer and Liénard 2006; Woody and Szechtman 2011), illustrated from the threat ecology of a specific historical example. I have selected the Roman Cult of Mithras as my case study for this cognitive historiographical study, not simply because this cult falls within the domain of my historical expertise but, more interestingly, because it was one of the most widely dispersed and densely distributed social groups in the Roman Empire. Largely based in the mobile populations of the military, merchants, and the petty bureaucracy, the Mithraists seem to have successfully developed a precautionary response to a threatening ecological context, to have done so in the absence of any centralized authority or supervision and, consequently, without having produced any shared text or common mythological narrative. This absence of any "canonical" Mithraic texts and myths necessarily "simplifies" historiographic research by focusing on the actual *behavior* of Mithraists rather than on their ideas or beliefs.[2]

The threat ecology of the Hellenistic world

In his study of *The Derveni Papyrus,* an Orphic theogony from the fourth century BC, the philosopher Gábor Betegh contended that:

> salvation, the healing of the soul, does not merely depend on the mechanical enactment of certain ritual acts and the incantation of holy texts; all these practices are not worth much without understanding *the situation which necessitates them,* the underlying significance of the acts and texts applied as remedy, and the way they can change the given conditions for the better. *Those who are involved should therefore understand the nature of the soul, the constitution and laws of the physical world, and the way the divinity governs both the soul and the world.* Ultimately, salvation resides, to a great extent, in genuine knowledge about these factors. (Betegh 2004: 369; *emphasis original*)

The situation that was understood by religions in the Roman Empire, such as the Roman cult of Mithras, to necessitate "salvation," that is, its "threat ecology," was what historian of religion Jonathan Z. Smith has called a "horror in the face of the vast" (Smith 1978a: 131). This "horror" was engendered primarily by spatial revolution, not only by the political expanse of empire,

but more comprehensively by a cosmological transformation of the traditional, local representation of a three-storied cosmos into a new, universal cosmos, in which a geocentric earth is embraced by seven planetary spheres and the whole by an eighth sphere of the fixed stars. This cosmological image, recorded by Claudius Ptolemy in his mid-second-century epitomes of current astronomical/astrological knowledge (the *Almagest* or *The Great Syntaxis* and the *Tetrabiblos*), represented a spatial expanse incomprehensible to all but the most learned. In the summary of Belgian classicist Joseph Bidez, "[t]he [traditional] idea of the beauty of the heavens and of the world went out of fashion [with the Ptolematic revolution] and was replaced by that of the Infinite" (Bidez 1939: 629, cited by Dodds 1965: 5). It was this Ptolemaic interruption to the hospitable certainties of the traditional, locative worldview that gave rise to and framed the threat ecology of the Hellenistic period.

Biologists associate encounters with unpredictable landscapes with the stability of "site-fidelity," that is, with a return to and reuse of a previously occupied location, characteristic of at least three phyla (Switzer 1993; Edwards et al. 2009). However, biocognitive pressures for site fidelity among inhabitants of the Hellenistic world were disrupted by the conflicting pressures of sociopolitical dislocation occasioned—in some cases, demanded—by conditions in the empire: expanded possibilities for trade and commerce, the redeployments of the military, and resettlement and colonization. This Graeco-Roman sociopolitical revolution challenged the traditional small-scale social structures and identity for which *Homo sapiens* were adapted by their evolutionary history, and which had been in place for millennia. Uncertainty about social standing or position, especially within novel environments away from home territory, activated the "security motivation system" as much as did cosmological perplexity (Woody and Szechtman 2011: 1026–1027).

The incomprehensibility of Hellenistic imperial and Ptolemaic space was ubiquitously represented as an intentional agent: the capricious cosmic rule of a fickle Lady Luck (Gk: *Tychē;* Lt: *Fortuna*) whose whimsical acts resulted both in tragedy and in joy.[3] The trick was to side with "good" luck, that is, with a controllable and comprehensible restraint on the chaos of infinite possibility, a soteriological prospect expressed during this period as devotional submission to various deities. For example, protection from the random acts of a personified *Fortuna* might be gained through devotion and obedience to

such a deity as Isis, whose early and persistent epithet was "Good Fortune" (Gk: *Isis Tychē Agathē*; Lt: *Fortuna Bona*) (Vanderlip 1972: 31–32, 78, 94–96). Thus, Lucius Apuleius, the second-century AD neo-Platonist and probable initiate into the Mysteries of Isis, in his novel *Metamorphoses* or *The Golden Ass* contrasted a blind, random, cruel, hostile, and wicked *Fortuna* with the protection of *Isis Fortuna Bona*—a majestic savior, who can see and whose light illuminates all (Apul. *met.* 11.15).

With the Ptolemaic revolution, however, deities like Isis increasingly became re-represented as removed from their original terrestrial domains, elevated to the celestial spheres and, finally, to a realm beyond the cosmos (Ptol. *tet.* 1.1). As they withdrew their presence from the material to the celestial world, they were replaced by numerous representations of intermediary demons that accounted for specific as well as for generalized threats of everyday life: sickness, suffering, poverty, war, death, etc.[4] While these demons were initially understood to populate terrestrial and sub-lunar space, they were progressively re-represented as a population of celestial powers, who, in pursuit of their own self-interested desires, oppressed, tormented, and afflicted mankind, inalienably separating it from the now-hypercosmic redemptive deities.[5] The threat ecology of the Hellenistic world, then, was represented by gods now perceived to be inconceivably distant, by the now unconstrained torment of demonic powers, and by a randomness of existence expressed as a "wandering" through the terrestrial world subject to the capricious rule of a personified cosmic *Fortuna* (Apul. *met.*; see Martin 1987).[6]

The Hellenistic precautionary response

The precautionary response evoked by an indeterminate "wandering" in an incomprehensibly vast world has been broadly characterized by the Oxford classicist E. R. Dodds as one of generalized "anxiety" (*q.v.* Dodds' classic study, *Pagans and Christians in an Age of Anxiety,* 1965). Although Dodds' characterization pertained to the period of time from Marcus Aurelius (b. 121, Emperor 161–180) to the fourth-century emperorship of Constantine, it was subsequently extended by a large number of scholars to the entire Hellenistic

period of Western antiquity (Smith 1978a: 161), that is, from the fourth century BC through the fourth century AD (Martin 1987: 4–6).

To generalize about the character an entire era is a presumptuous task—some would say a futile one. For example, the historian and classicist Ramsey MacMullen, with reference to Dodds' characterization of the Hellenistic period as one of "anxiety," protests that assigning "a single characteristic to so long an era" is like saying that "in Italy, Switzerland, the Low Countries, Britain, France, and Spain between about 1400 and 1600, people were tense and worried" (MacMullen 1981: 123). It is, of course, true that historians must be wary of overly broad generalizations. But, along with our Papadimitrian simplifying focus on *behavior*, what if assigning a single character to a particular historical period might be viewed as a second kind of Papadimitrian simplification that isolates a small part of complex human behavior in order to allow for interesting theoretical—and historiographical—reflection? Such simplifying generalizations—like any form of generalization—have, of course, their own assumptions and history that have been differently inflected in different times. This is the case with the notion of "anxiety" ever since Hippocrates described *melancholia* in the fifth century BC as "a fright or despondency that lasts for a long time" (Hp. *aph*. 6.23), which is caused by an excess of black bile (Hp. *aër*. 10).[7] Thus, MacMullen's analogy of "anxiety" to "tense and worried" frames his critique of Dodds' characterization of the Hellenistic age in terms that assume a contemporary assessment of what social scientist Martin Gross has called a "psychological society" (Gross 1970).[8]

Closer to Dodds' meaning of "anxiety" is the general existential condition of human being. Dodds begins his monograph with Tolstoy's dictum that "[t]he meaningless absurdity of life is the only incontestable knowledge accessible to man" (Dodds 1965: 1) and he subsequently refers to the existential notion of "absurdity" as understood by the French philosopher Albert Camus (Dodds 1965 13, *q.v.* Camus 1955). Of more interest to historians, perhaps, is the attempt by the German existential-phenomenologist Martin Heidegger to understand this fundamental condition of humanity in its temporality.[9] For Heidegger "anxiety" (*Angst*) is the constitution of human-being as *Dasein*, that is, as a being "there" in-the-world (*In-der-Weltsein*). Similar to the views of Tolstoy and Camus, this "anxiety" is occasioned by the indefiniteness (*Unbestimmtheit*) of *Dasein*'s indiscriminate "throwness" (*Geworfenheit*) in-the-world (Heidegger

1996: 6, 10, 127, 172–178).[10] Rather than referencing some particular malady of antiquity, or a clinical diagnosis of some psychological disorder, anxiety can then refer to a universal state of human meaninglessness throughout humanity's temporal existence.

For evolutionary psychologists, too, anxiety is the historical expression of a universal human condition. Neuroscientists Erik Woody and Henry Szechtman, for example, have hypothesized that anxiety is evoked among humans—as across a range of species—in part by the presumed detection of hard-to-predict threats in the environment. Unlike reflexive, fear-based, "flight, fight or freeze" responses to *specific* physical threats, anxiety motivates a precautionary system in response to perceptions of *potential* threats (Woody and Szechtman 2011: 1019, 1021, 1023, 1027). These perceived threats have shaped an evolved "security motivation system," which, they hypothesize, is the activation of a defined neurophysiological network (Woody and Szechtman 2011).[11]

Historical representations of potential danger are shaped by implicit learning (Sapolsky 2004: 320), that is, by an evaluation of "current environmental stimuli in the context of the individual's learning history and goals" (Woody and Szechtman 2011: 1021)—human minds "*in der Welt*," as it were. As the cognitivist George Lakoff argues, such implicitly learned appraisals of potential dangers can become fixed in the neural circuits of the brain as cognitive frames or narratives which can be activated reflexively or can function unconsciously and from which, he cautions, "there is no erasure in the brain (short of brain damage)" (Lakoff 2008: 34, 237). In other words, once the psychologically motivated security system is activated, there are no external stimuli in the physical world which might provide assurance that perceived threats of potential danger are no longer present (Lakoff 2008: 41; Woody and Szechtman 2011: 1021, 2006: 635). Because such anxiety responses are generally "inexpensive and protect against huge potential harms, an optimal system will express many alarms that are unnecessary in the particular instance, but nonetheless perfectly normal" (Nesse 2005: 912–913).

Hellenistic anxiety, then, can be understood as a generalized precautionary response to perceptions of an uncertain and unpredictable cosmological and political environment. As the art historian J. J. Pollitt has concluded, although "every individual and every social group no doubt feels anxiety at one time

or another when faced with the uncertainties of life," the environment of "the Hellenistic age seems to have made this anxiety so intense that its personified source, Fortune, became an obsession" (Pollitt 1994: 14). Thus, Hellenistic "anxiety," that is, responses of the hazard protection system, was manifest as a wide range of behavioral and cognitive changes. When it resulted in excessive and uncontrollable reactions to environmental perceptions, it could even tend toward obsessive-compulsive behaviors (Woody and Szechtman 2011: 1028, 1030)[12]—as some of the more rigorous rituals of official Roman religion document (Griffith 2009: 155–162).

Ritual as apotropaic

In face of the threats perceived in an "uncontrollable and unpredictable" habitat, animal behaviorist David Eilam has hypothesized that ritual or ritual-like behavior is a salient, anxiety-reducing apotropaic, in humans as in other species, a hypothesis already proposed by Bronislaw Malinowski (1992: 79). For Eilam, such rituals are efficacious in the face of such contexts of potential threat because they are "executed according to explicit rules and thereby confer a sense of controllability and predictability" (Eilam et al. 2011: 1000). Similarly, Woody and Szechtman propose that ritualized behavior "may serve to substitute a clearly defined, closed-ended task for the uncertain, open-ended problem of potential threat" (Woody and Szechtman 2006: 634). What both of these hypotheses concerning anxiety-reducing rituals have in common are formal and predictable instructions and procedures for how to behave in the face of felt threats—however imprecisely or indecisively those potential threats may be.[13] Such concern for a perfectly systemizable, and thus perfectly predictable, world is a trait also associated with classic autism (Baron-Cohen 2011: 152), which is characterized by its "unusually narrow and restricted interests and extreme repetitive behavior" (Baron-Cohen 2011: 155). But simply to identify ritualized behavior as an anxiety-reduction response to potential threats is based on historical or ethnographic correlations without theoretical corroboration.

A leading modern treatment for anxiety is pharmacological, which includes selective serotonin reuptake inhibitors (SSRIs) that increase the

amount of the neurotransmitter serotonin (*DSM IV-TR*). "[F]or the people of Antiquity," however, as the sixteenth-century French philosopher Estienne de la Boétie wrote,

> theatres, games, plays, spectacles, marvelous beast, medals, *tableaux* and other such drugs were … the price for their freedom …. (de la Boétie 1971: 65; cited by Smail 2008: 173)

In his groundbreaking study *On Deep History and the Brain* (2008), the Harvard historian Daniel Lord Smail has argued that religious rituals—like such practices as "sports, education, novel reading, pornography, recreational sex, gossip, military training"—all reinforce or inhibit synapses and receptors and stimulate, beyond baseline levels, the production or reuptake of various neurochemicals (Smail 2008: 118). That is, the drama, the production, the processions, the pageantry, the masks, the imagery that characterized the rituals of the Hellenistic mystery cults essentially effected a "psychotropic therapy" for anxiety (Martin 2005b: 353).

Whatever the specific mechanism, ritualization as a precautionary response to perceptions of an uncontrollable and unpredictable ecology is well documented from the Hellenistic period. Examples of attempts to stabilize the uncertainties of life during this period included the rigidly controlled orthopraxy of the official state cults (Griffith 2009) and such popular predictive obsessions as astrology—the most widespread popular practice in face of perceptions of cosmic randomness at the beginning of the Roman Imperial period (Cumont 1960: 32, 51–52, 1956: 176–182). With its astrologically framed rituals, the Mysteries of Mithras offers an exemplary historical case of the human hazard precaution system operating in face of the Hellenistic ecological spatial threat.

The ritual repertoire of the Mithraic hazard precaution system

The ritual repertoire of the Mithraic hazard precaution system, to our knowledge, consisted of but two rites: initiation and a cult meal. Analyzed according to the Lawson and McCauley ritual-form hypothesis (Lawson and McCauley 1990), these two rituals seem to constitute a system minimally

balanced between a special agent ritual (initiation) and a special patient ritual (meal) (Martin 2004, 2005a).

The Mithraic meals

There is little consensus about the significance for Mithraists of the meals partaken in the mithraea. Inferences based on the Lawson and McCauley hypothesis, together with some evidence from Mithraic material culture, suggest that the Mithraic meal had some sort of sacrificial significance, though the evidential basis for that conclusion remains weak (Martin 2004: 253–256). Whatever its cultic significance, the Mithraic meal would have been an important rite of Mithraic brotherhood, a meal of fellowship of the kind that was common to virtually all social gatherings in the Graeco-Roman world. This communal aspect of Mithraism would have addressed Hellenistic spatial challenges to traditional social identity by providing for initiates a patterned and predictable social system that was parallel and alternative to the bewildering morass of mobilities that characterized the Roman world (Gordon 1972: III, 112).

The social structures and functions of religion have, of course, been emphasized since Durkheim. However, many contemporary scholars of religion now elaborate upon Durkheim's descriptive insights with behavioral themes based in evolutionary theory, for example, strategies of prosociality and cooperation, costly signaling and commitment to the group, hierarchical placement within the group, and the demographics of mortality and natality (e.g., Turchin 2007; Bulbulia and Sosis 2011). However, membership in such restricted social circles required some form of initiation into the group and its practices—at least in the historical example of Mithraism.

Mithraic initiation

More is known about the Mithraic rite of initiation than about its cult meal, both from Mithraic material culture and from theoretically grounded comparative analogies (Martin 2004, 2005a). To return to Betegh's advice, understandings of such ritual practices "are not worth much without

understanding the situation which necessitates them," that is, without understanding the views about "*the world,*" and of the *relationship* of the soul to the world which those practices presume (Betegh 2004: 369, *emphasis added*).[14]

In the Roman cult of Mithras, as in, for example, the Eleusinian cult of Demeter, initiatory space is organized, respectively, in terms of contrasting cosmologies: utopian and locative (Smith 1978a: xii, 100, 308–309). The Eleusinian cult site was fashioned at the base of a naturally occurring hill. This site represented for the cult the "locative" three-storied cosmos of antiquity with its hilltop stretching toward the heavens, an abris or shallow grotto at its base representing the dreaded entrance to the underworld, and the *telesterion* or terrestrial temple of initiation nestled in between. Initiates processed from Athens to Eleusis along the *hieros hodos*, to the *temenos* of the Eleusinian sanctuary and, then, within, past the fearful "entrance to the underworld," into the *telesterion*, the place of initiation itself (Clinton 1992). As a consequence of their initiation rites, initiates (their souls) presumably understood themselves to have had a "soteriological" encounter with the chthonic goddess herself (or, her surrogate hierophant).

On the other hand, initiation into the Mithraic mysteries reveals, according to the neo-Platonist Porphyry, "the path by which souls descend and go back again" through the celestial spheres as represented by the "utopian" Ptolemaic model (Porph. *de antro*. 6). For the Mithraists, "salvation" consisted of the "soul's" reascent, which occurred ritually in the Mithraic temples, or mithraea.[15] According to Porphyry, these mithraea were constructed in caves (*speleae*), either natural or artificial, that were understood to be "an image of the cosmos" (*eikona tou kosmou*) (Porph. *de antro.* 6.18). With reference to Jay Appleton's Darwinian typology of landscape representations, these caves would represent cosmic places of refuge (Appleton 1996, 1988), which provided a protective space for the Mithraic fellowship, alternative to that of a social world disrupted by the mobile and socially unstable conditions of empire. When initiates traversed this Mithraic initiatory microcosm, the status attributed them by the brotherhood ritually discriminated initiates from non-initiates, initiates from their initiators, initiates from fellow initiates of different grades, and from those unable to relate to the cosmic

Mithras Sol Invictus (Lewis-Williams 2010: 192); nevertheless, initiates were greeted socially as *syndexii*, the egalitarian name for all initiates who were bound together in the brotherhood by the grasping of right hands (Merkelbach 1984: 107).

In addition to providing the space for the ritual reestablishment of an initiate's social status, at least within the Mithraic community, Roger Beck, the Toronto classicist and specialist on Mithraism, has argued persuasively that "the mithraeum is a special case of a cognized environment" (Beck 2006: 141–148). "The intent of the Mithraic mysteries," Beck argues:

> was not to abolish but to *redefine* the [initiates'] mind … Literally, this was a process of *reorientation* … in which … a new map [was] substituted for or superimposed on the old … Such *re-cognition* could only be acquired by activity within the mithraeum (moving around, occupying space) and by sense perception of "the things inside in [their] proportionate arrangement." (Beck 2006: 145, *emphasis original*)[16]

In other words, a ritual stroll through the mithraeum,[17] the Mithraic representation of the cosmos, provoked, with its affective practices of sensory arousal, a cognitive as well as a social reorientation among initiates (Martin 2005b, 2006, 2014b).

Initiation within the mithraeum, the Mithraic "compressed" representation of the Ptolematic "cosmos,"[18] presented each initiate with a specifically Mithraic array of cosmic imagery. The British psychologist Meredith Gattis has argued that the kind of knowledge conveyed by such images consists of a correspondence between or a mapping of spatial representations and abstract concepts. The significance of such images

> is *not* like reading a written language, in which the connection between symbol and referent is usually arbitrary (Gattis 2001: 244, *emphasis original*). Rather, research in linguistics, semiotics, and cognitive and developmental psychology suggests that "[r]eading pictures, or more specifically reasoning with spatial representations, is more direct and easier to acquire" (Gattis 2001: 224). [W]e are able to … infer meanings from these representations *without specific instructions in how to do so.* (Gattis 2001: 244, *emphasis added*)

Rather, the Mithraic "compression" of cosmic imagery in the mithraeum remapped the perceived randomness of the unimaginably expanded Ptolemaic

cosmos and its aggressively hostile mythologization to present initiates a recognized cosmic refuge, that is, an accessible, controllable, predictable being-, i.e., being-in-the-world (Frith 2007: 126; see also Smith 1978a: 289–309).[19] In contrast to a "physical self," or the self where we feel our own body based on sensory feedback from the skin, joints, abdominal cavity, etc., the German clinical psychiatrist Uwe Herwig has shown that the "cognitive self" is "where we recognize and reference ourselves in the world" (Herwig 2010: 61). The function of the cognitively represented self is to keep self-image in correspondence with reality (Herwig 2010: 63), whether that "reality" is objectively given or ritually constructed.

Ritualized strategies for biocognitive reorientation allow for an avoidance of risk whereby natural phenomena (such as empirical views of the cosmos) are "harnessed" into a complex nexus of beliefs, practices, symbols, and social divisions. Such "harnessed" cult sites, practices, implements, and symbols externalize what would otherwise be merely ideas existing in human heads and give these mental states a new kind of reality (or agency), which can have influence of their own (Lewis-Williams 2010: 196). In addition to their social aspects, then, the significance of such rites, as the Mithraic, can be summarized as strategies for a "cognitive reappraisal" or as techniques of re-representation whereby initiates reflected upon reflexively activated experiences and reframed them in a positive way (Martin 2005b; Herwig 2010; on cognitive processes of "representational redescription" see Karmiloff-Smith 1992). Rather than any occult transmission of esoteric teachings, it was the rite of initiation itself with its cognitive remapping of the cosmos that constituted initiation into the Roman cult of Mithras.

The Mithraic cognitive cartography

Plastic representations of the cosmos were familiar in Western antiquity ever since a celestial model was introduced by Greek astronomer and mathematician Eudoxus of Cnidus in the fourth century BC. This model was used regularly thereafter in schools. In the third century BC, another Greek astronomer and mathematician, Archimedes of Syracuse, was well-known for his constructions of celestial globes, two of which were brought to Rome by Marcus Claudius Marcellus following his conquest of Syracuse in 212 BC.

Marcellus kept one of these for himself; the other was displayed in the Temple of Virtue and Honor (near the Porta Capena opening south through the Servian walls onto the Appian Way). And in the third century BC, the Greek mathematician Eratosthenes of Cyrene, a friend of Archimedes, invented the armillary sphere.

Eratosthenes was also the first to measure the circumference of a global earth (Cleomedes *de motu*)—exceeding the modern measurement of 24,902 miles by but 41. Eratosthenes' achievement was followed by the first model of the terrestrial globe, which was introduced by the Stoic philosopher Crates of Mallus in the second century BC (Strab. *geog.* 2.5.10). This is to say that representative models of the earth and of the cosmos were familiar in the Graeco-Roman world. Although the cosmological models of Eudoxus and Archimedes and the terrestrial globe of Crates were empirically based, all representations of environments are nevertheless "cognitive maps" (Pinheiro 1998: 323) by which a comprehensible order is imposed upon perceptions of physical geography (Kitchen and Blades 2002: 58).

The notion of cognitive maps was originally proposed by Edward Tolman in 1948 to explain how rats (and other animals) are able to return directly to their home base after randomly foraging in their environments. He discovered that certain hippocampal and parahippocampal neurons, which he called "place cells," fire differentially as the rodents changed directions, constructing, thereby, a cognitive map of their environment (Tolman 1948).[20] Though Tolman's hypothesis remains somewhat controversial (e.g., Roberts 2001; Dudchenko 2010: 26–30), such cognitive navigation has been largely accepted for humans as well as memory-related firings of hippocampal neuronal ensembles, even for highly abstracted representations of space, that is, for representations of space that are independent of sensory input (Kitchen and Blades 2002: 10; Hassabis et al. 2009: 546–547, 551; Dudchenko 2010: 115–189).

When exposed to a new complex or macro-environment, usually just a few elements of that environment are selected to accomplish a reasonably organized cognitive representation of it (Pinheiro 1998: 335). So, for example, astrological identification of constellations was a way of representing a complex and cognitively costly environment by tying it to less costly "anchoring figures" (Pinheiro 1998: 324). Such "cognitive maps," which encode a range

of cognitive and symbolic aspects of the environment (Pinheiro 1998: 322; Kitchen and Blades 2002: 1), are the visual surrogates for "real world" places (Pinheiro 1998: 322; Gribbin 2004: 103).[21] The information they provide about relationships in the environment influences decision making and behavior in that environment more than their "realworld" counterpart (Kitchen and Blades 2002: 40, 57).

The only sources of information about representations of environments at scales that cannot be directly experienced—countries, continents, the planet, the cosmos—are secondary (Kitchen and Blades 2002: 44). They represent, in the words of systems analyst Kenneth Boulding, "an extraordinary condensation of information" (cited by Wright 1988: 218) that relies on and relays social information related to meanings shared in their representations (Pinheiro 1998: 323). Such abstract (geopolitical or cosmological) frames of reference locate all other known places within the same frame of reference, regardless of actual place, time, and relationship (Kitchen and Blades 2002: 65). Consequently, behaviors and relationships are determined by the information such cognitive maps embody (Boulding 1961: 3–18).

Although characteristics of physical geography constrain cognitive representations of space (Kitchen and Blades 2002: 40, 57), as is exemplified by the Eleusinian topography of the Demeter sanctuary, cognitive maps are nevertheless easy targets of manipulative political or mythological propaganda (Pinheiro 1998: 322), especially since emotional attachment often plays a role in spatial orientation (Kitchen and Blades 2002: 43). Naïve viewers of cosmological representations, then, are subject to a bias of "cartographic realism," by which representations of the environment, which may be socially, politically, and/or mythologically governed, are taken as "reality." Consequently, cosmic mapping is a powerful mechanism for psychological control, especially when there is deficient understanding of the physical environment (Kitchen and Blades 2002: 43), as with the incomprehensible vastness of the Hellenistic world.

The appeal of the Mithraic cognitive cartography, then, was that while it was mapped upon the prevailing Ptolemaic cosmology, it nevertheless offered a compressed and comprehensible alternative to this unfathomable public representation. Although both of these cosmologies might "inhabit" the minds of Mithraic initiates, they were mutually inhibitory, that is, the

use of one shut off use of the other.[22] Consequently, a Mithraic initiate who had detected and suffered the potential threats posed by the spatial expanses of Hellenistic cosmology might inhibit the anxiety associated with that cosmology through ritual participation in the parallel but alternative world of *Mithras Sol Invictus*.

Conclusion: A cognitive historiography

I have suggested, in this chapter that various historical assays of "anxiety" are analogues for a generalized human condition that evolved for the detection of hard-to-predict threats in the environment and that is managed by a stable neurophysiological system. Given the evolutionary precautionary strategy of being "better safe than sorry," this adaptive system often occasions an intensity, duration, or frequency of anxiety and worry that is far out of proportion to any likely historical actuality.

I have argued that disproportionate patterns of anxious behavior markedly characterized the threat ecology of the Hellenistic period and that this threat was occasioned by popular incomprehension of and disorientation in the face of a transformed and immeasurably expanded cosmos. This Hellenistic threat of an inexplicable existence was "explained" in terms of the cognitive default of agent causality, that is, by the capricious rule of personified luck (*Fortuna*).

Further, I have explored the ritual system of the Roman cult of Mithras as an apotropaic response to this Hellenistic ecology of threat. This response offered initiates into the Mithraic brotherhood both a predictably structured communal counterpart to the social perplexities of empire as well as a comprehensible, cognitively mapped alternative to an unfathomable Ptolemaic cosmological expanse.

If socially cohesive religious groups functioned historically as hazard protection systems, I might further suggest that the regulated boundaries of Mithraic cells would have also defended their mobile military and mercantile adherents against the real threat of those communicable diseases to which they might have been exposed as a result of their frequent and wide-ranging deployments throughout the disease-ravaged expanse of empire (Stark 1996: 73, 76–77; Wiebe 2013).

Whether or not these explorations into the ecology of threat detection in the Hellenistic world are judged to rest upon overly "simplifying assumptions" (*pace* Papadimitriou), they nevertheless suggest a historical instantiation for a human security motivation system, such as that proposed by Woody and Szechtman. And, if this historical instantiation has any validity, the ritual system of Roman Mithraism provides a specific example for the precautionary behavior predicted by that system. In these ways, the employment of evolutionary theory, of insights from the cognitive sciences, and of historiographical method, can mutually evoke new questions about human behavior while providing empirical constraints upon their answers with respect to the past as well as to the present.

6

The Landscapes and Mindscape of the Roman Cult of Mithras

"Landscape" is a concept that carries various meanings in different contexts. Etymologically, the notion defines a certain expanse of space, "land," predicated by the suffix, "–scape." This suffix is related to the Old English *sceppan* or *scyppan*, meaning "to shape" and is equivalent to the more common English suffix "–ship," which designates the "nature," "state," or "constitution" of something (Olwig 2005). In common usage, "landscape" is analogous to a modeling of other defined spatial expanses, for example, seascapes, (fresh) waterscapes, or moonscapes. In addition to landscapes, I shall also refer to cosmoscapes, that is, to models of cosmological space, and to mindscapes, the neurological correlates of these spatial representations. All of these objects of the suffix "–scape" represent models that attempt to define humans' relationship to natural expanses of space.

Humans are both terrified by, as well as attracted to, the uncultivated expanses of nature and its predatory dangers. In the observation of Lucretius, nature, apart from civilization, "is filled full of restless dread throughout her woods, her mighty mountains and deep forests" (Lucr. v. 56–59). Among humans' first concerted attempts to contend with nature was their creation of civilization, a domestication of space that walled nature out of their circumscribed settlements and cities. But, conversely, humans' fascination with nature led to the creation, within their civilized space, of walled-in models of nature tamed, such as formal gardens and zoos (or, as the Germans call the latter, *Tiergärten*). The various fauna and flora of these enclosed landscapes—the animals and aquaria, the tulips and the topiaries—all represent idealized models of nature, which humans might now safely experience. An extraordinary example of such an idealized landscape from

antiquity is Varro's elaborate *ornithon* or aviary, which he constructed at his villa, near Casinum (on the Via Latina about forty miles north-west of Capua) and describes in his *de re rustica* (3.8–17).[1]

The landscape of the Roman Empire itself was, of course, defined by its extraordinary spatial expanse, which Romans understood to constitute "the known world." By the Augustan period, a model of this *orbis terrarium* was displayed in Rome in the *campus Agrippae* (Plin. *hn* 3.17) (Tierney 1963: 151–166; Nicolet 1991: 78). This spatial expanse of empire, however, could only be grasped intermittently and incompletely—by Roman soldiers and sailors in their military deployments and redeployments, for example, or by inter-provincial traders, or by its relatively few mobile citizens of means.

Existence in the midst of this largely unimaginable space was characterized by the mid-second-century AD philosopher and novelist Apuleius as an itinerant "wandering" (Apul. *met*. 11.20), as it was from the Mithraic diaspora as well (*CIMRM* 823).[2] Here, I would like to suggest that the Roman cult of Mithras modeled the landscape of the "known world" in ways that ordinary "wanderers" might safely have located and oriented themselves.

A Mithraic landscape[3]

In an article that I published some three decades ago, I proposed to understand Hellenistic religions as a field of systemic relationships identified in terms of a Foucauldian play of sympathies and antipathies (Martin 1983: 139–140). Today, the intricacies of such relationships are more precisely measured by recently developed social theorists who emphasize that "humans don't just live in groups"; they "live in networks" (Barabási 2003: 170; Christakis and Fowler 2011: 214). Network theorists then seek to map those relationships in a particular spatial network, a recently developed model that has already been productively employed in historical studies of the ancient Mediterranean world (Eidinow 2011a; Malkin 2011; Malkin et al. 2011) and suggested as the model for the successes of early Christianity (Stark 1996: 20; Barabási 2003: 3–5, 7, 19, 129, 136).[4]

Two general models have been proposed to describe (and to explain) these networks: the genealogical or tree-model of singular origination with its

serial continuity of relationships, and the "small-world" model of asymmetric relationships (Malkin 2011: 41–42; Shryock and Smail 2011: 3–20), both of which can be exemplified by explanations for the widespread but decentralized distribution of Mithraic cells throughout the Roman Empire.[5]

The tree model

The tree model has been used productively to represent instances of linguistic diffusion, for example, that of Indo-European languages, or of scientific change, for example, biological evolution. As a general model of human relationships, however, this model is ultimately derived from the Genesis story of common origins that dominated Western views of history until the nineteenth century but that more often models mythological fantasy than historical reality (Smail 2008: 12–39; Malkin 2011, 41–42; Shryock and Smail 2011: 6–17; Shryock et al. 2011: 32–38). Christianity, for example, is typically presented in terms of this arboreal myth, whereby its historical diversities are represented as forking branches of a leafy tree rooted in the founding actions and teachings of Jesus of Nazareth.

Mithraic studies have also presumed an arboreal model of common historical roots. The traditional view, argued by Franz Cumont, is that Mithraism split from its Persian origins into several intermediate branches during its spread to the West before branching further into its various Roman forms (Cumont 1956). David Ulansey, following the report by Plutarch (Plut. *vit. Pomp.* 24), has emphasized the Cilician origins of Mithraism, which was transmitted to the West by pirates (Ulansey 1989: 40–45). Also, Roger Beck has argued that Mithraism originated among the "dependents, military and civilian, of the dynasty of Commagene as it made the transition from client rulers to Roman aristocrats" (Beck 1998).

Whatever the historical validity of any of these originative arguments, none of them explain any relationship between the widely distributed cells of Mithraism, apart from an presumption that some historically identifiable relationship must survive from their singular origin, a relationship that modern scholars construct upon the scaffolding of their own assumed expectations. If, however, the mythological tree of origination is felled, there is little explanation remaining for how a pluralistic dispersion of autonomous

Mithraic cells, distributed throughout the expanse of the Roman Imperial landscape, might have been related.

The "small-world" model

The small-world model of network theorizing is part of complexity theory generally; it is based in mathematics and experimentation, not in myth (Watts and Strogatz 1998). It addresses, in part, the self-constitution of patterns and their decentralized, non-hierarchical organization (Gribbin 2004: 125; Malkin 2011: 25, 205, citing Barney 2004: 2)—the pattern of organization that is characteristic of the distribution of Mithraic cells.

Most succinctly, the small-world model maps specific patterns of ties between related nodes (which may be delimited as individuals, groups, or clusters of groups) (Malkin 2011: 27). Connections between nodes in the "small-world model" are not necessarily contingent. In fact, its decentralized model requires a release from proximity (Wortham 2006: 118), in which connections are measured by their "degree of separation" rather than by their physical distance, that is, by the number of nodes which must be traversed to reach a target node (Collar 2011: 146; Malkin 2011: 9, 13). The number of these "short path" connections is relatively small. Whereas the minimum requirement to stay connected is but one link per mode (Barabási 2003: 18), Stanley Milgram has famously demonstrated that everyone is connected by no more than "six degrees of separation" (Milgram 1967; Travers and Milgram 1969).[6]

In contrast to degrees of *connection*, recent research also documents networks of *influence* that are characterized by three degrees of separation or less, that is, from one's friend, to one's friends' friend, to one's friend's friend's friend (Christakis and Fowler 2011: 28–29; Watts 2011: 94–98). *Homo sapiens* have simply not lived in larger groups long enough for evolution to have favored those who might extend their influence beyond three degrees (Christakis and Fowler 2011: 29).[7] Content that moves along the lines of either network, whether it is information, behaviors, artifacts, or power, is referred to as its "flow" (Barney 2004: 27; Sperber 2006: 435; Malkin 2011: 17–18, 25). And although these network flows may move from one node to another in one direction only (Barney 2004: 27; see the possible example

of the Andros mithraeum, *infra*), flows in successful networks are typically multidirectional (Malkin 2011: 18, 115).

A decentralized network theory may be characterized further by objects which are shared, replicated, and disseminated (Smail et al. 2011: 236), and by a process of "kinshipping" (Shryock et al. 2011: 31–34; Trautman et al. 2011: 160–188), the mythological claim to a common genealogy. The decentralized network of Mithraic cells, for example, shared a central cult object, the tauroctony or bull-killing scene, which was faithfully reproduced in all mithraea (their places of gathering and ritual); however, the faithful transmission of this image throughout the empire might have been realized. In addition, every Mithraic association was organized as a fictive kinship group of *fratres* under the leadership of a local—but never a translocal—*pater*, all of whom claimed a ritually established kinship with their god, Mithras (Martin 1997).[8]

Research by evolutionary biologist Robin Dunbar and colleagues confirms that associations organized as (fictive) kinship groups have special status in terms of bonds of intimacy (Dunbar et al. 2005: 99). Such claims to kinship resonate well with *H. sapiens* as a rationale for the transformation of local networks into large-scale imagined communities in which autochthonous "houses become worlds" (Bloch and Sperber 2001; Martin 2004: 129–130; Trautman et al. 2011: 181). For example, a claim to kinship among all Greeks was explicitly exploited by Alexander the Great as an identifying ideology for the first Western empire (Arr. *anab*. 7.11; Diod. 18.4.4; Plut. *de Alex. fort*. 1.329 C–D). However, the Mithraists, like various fictive kinship groups of the Roman world—the *collegia* and other religious groups—never seem to have developed their parochial claims of kinship into a comprehensive ideology supported by centralized government, as did some of the early Christian groups, especially those in the Pauline tradition.

Network theory identifies two types of network connections: "strong" or "weak." Strong ties bind closely associated nodes into tight webs of clearly defined relations at the expense of the larger world, as was the case with the early Christian communities documented by the synoptic traditions (Christakis and Fowler 2011: 157). Weak or relatively loose ties between nodes, however, encourage a larger, shared (if nebulous) "imagined community" (Benedict Anderson 1991; see also Christakis and Fowler 2011: 68–69; Barabási 2003: 42), such as would seem to be the case with Roman Mithraism.

Part of the problem with an inclusive strategy for Mithraism was that its diffusion was largely dependent on that of other institutions within which Mithraists were embedded, that is, on the deployments and redeployments of military units (Daniels 1975), on the settlement of veterans at their retirement (Pachis 1994: 249), on the assignments of civil servants such as customs personnel, on loyalty by clients and slaves to their increasingly mobile patrons (Beskow 1980), etc. Consequently, an "autonomous" or "mature" Mithraic network of material, or even informational, interchange never fully developed. Nevertheless, we can document some "flows" between certain Mithraic nodes, for example, that between four members of the Praetorian Guard, who, in the late first/early second century, were assigned to the island of Andros where they founded a mithraeum (*CIMRM* 2350). As far as we know, that flow was primarily unidirectional, that is, only from the direction of the mithraeum in the *castra praetoria,* their home base in Rome (*CIMRM* 297, 298), to the new Mithraic cell in Andros. However, these guards must have remained in some reciprocal communication with their military superiors in Rome, whether that communication was solely military or whether it might also have included flows between Mithraic *fratres.* And, of course, there are some historically traceable establishments of mithraea, for example, those in the wake of movements by the Legio V Macedonica, and by deployments of its subunits (Daniels 1975: 251; Pachis 1994: 243–244, 249–250),[9] although we have no evidence of any continuing flow among them. Still, some regional similarities in iconography suggest that there may have been flow between and among some local Mithraic nodes, for example, in Germania. Further, thematic similarities between some Mithraic imagery, such as that between the initiatory scene on the Mainz cup and that on the second panel of the Capua Vetere mithraeum, might be explained by idiosyncratic links between Mithraic nodes (Beck 2000).

By documenting the empirically tractable links between Mithraic nodes, both of separation and of influence, it might be possible to describe, and even to explain, a Mithraic network and its possible connections, however weak and contingent those connections might have been. Even if immature, the description of this Mithraic network can perhaps provide a more accurate and informative explanation for a relationship among the decentralized distribution of Mithraic cult cells through the spatial expanse of empire

than have previous efforts to describe a coherent cult of Mithraism in terms of a shared mythology or set of doctrines assumed to be based in common historically distant roots.

The Mithraic cosmoscape

If we allow for a broad definition of landscape as a modeling of humans' relationship to their natural environment, even the imperial expanse of geographical space paled in face of the cosmological. Traditional mythological views of a locative cosmos had been eclipsed by the astronomical revolution documented by Ptolemy in the mid-second century AD but dated from earlier scientific findings, such as Hipparchus' discovery of the precession of the equinoxes in the second century BC. In the conclusion of Belgian classicist Joseph Bidez, "[t]he [traditional] idea of the beauty of the heavens and of the world went out of fashion and [with the Ptolematic revolution] was replaced by that of the Infinite" (Bidez 1939: 629; cited by Dodds 1965: 5), a scientifically described expanse of unconstructed, natural space. The spatial magnitude and mathematical complexity expressed by Ptolemaic cosmology was virtually incomprehensible to all but the most highly trained astronomical specialists. When ordinary (folk) intuitions are unable to provide relevant explanations about an environment, human minds are prone to seek reasons for their fortunes and misfortunes other than the physical or biological. Under such conditions, the use of superhuman agency is easily adopted (Visala 2011: 2). It is, therefore, unsurprising that a deity of luck (Gk: *Tychē*/Lt: *Fortuna*) was, with the dawn of Ptolemaic cosmology, increasingly venerated throughout the Graeco-Roman world (Martin 1987; Eidinow 2011b), along with a number of more "specialized" deities, such as the Roman deity, Mithras.

If Mithraism situated itself in the geographical expanse of the Roman Empire as a "small-world" network, it situated itself similarly in the spatial expanse of Ptolemaic cosmology by constructing its own small-world "cosmoscape," as did others during this period, for example, the augural *templum* in Bantia as described by Varro (*de ling. lat.* 7. 6–10). This templum was constructed with precisely fixed and oriented boundaries, marked by trees.[10] Mithraea were also constructed in very precise ways, in terms,

however, of astrological relationships. Franz Cumont has shown that a popular astrology was the most widespread popular attempt to comprehend the new Ptolemaic expanse and that it in some way informed virtually all religious expressions at the beginning of the Roman Imperial period (Cumont 1960: 32, 5152; see Beck 2007 and Barton 1994). A Mithraic microcosm and its relationship to the Ptolemaic macrocosm were astrologically modeled in the architecture of every mithraeum, and by the tauroctony, the focus of every mithraeum. These two spatial representations are the only features common to all Mithraic cells. Since I (Martin 2005, 2013 [Chapter 5, this volume]) and especially Roger Beck (2006) have written extensively about the astrological structure of the mithraea and the tauroctony, I should like here only briefly to rehearse the significance of their cosmological modeling.

The architecture of the mithraea, which were constructed in caves (*spelaea*), natural or artificial, represented, according to Porphyry, the Mithraic "image of the cosmos" (*eikona tou kosmou*) (Porph. *de antro.* 6), an assessment confirmed from their archaeological remains. The upper vault of these mithraea was often painted blue and decorated with stars to represent the arch of the heavens. Importantly, the seven planets of the Ptolemaic cosmology were prominently accentuated. The tauroctony, in turn, represented a "reduced," specifically Mithraic, cosmological image. It was a star-map that represented the cosmos in terms of selected constellations that were precisely related by their contiguous positions on the ecliptic, the path of the sun's annual orbit around the earth (Beck 2006: 31–32, Figure 1, and 160).

Rather than focusing exclusively on the significance of the specific imagery employed in the composition of this central cult image, as has traditional scholarship, attention might rather be turned to understanding the tauroctony as a cosmoscape that represented a distinctively Mithraic inflection of Ptolemaic cosmology. Its tauroctonous composition uniquely remapped the perceived expanse and randomness of Ptolemaic cosmology to present initiates an accessible alternative to their incomprehensible view of unconstructed cosmic space as well as to a heterogeneous world disrupted by the mobile and socially unstable conditions of empire—with a small-world place of "refuge," to borrow a classification from the geographer Jay Appleton's Darwinian typology of landscape representations (Appleton 1996 and 1988).

In the judgment of Roger Beck, this Mithraic microcosmic refuge offered, in addition, "a special case of a cognized environment" (Beck 2006: 141–148), which provoked mental as well as spatial mappings for initiates into the cult. And, ancient historian John Ma has argued that the shared culture of networks in the Hellenistic age (Renfrew and Cherry 1986, cited by Ma 2003: 15) generally operated, for inhabitants of those networks … as a "cognitive map" (Ma 2003: 21).[11]

The Mithraic mindscape

The notion of cognitive maps was originally proposed by Edward Tolman in 1948 to explain how rats (and other animals) are able to return directly to their home base after foraging randomly in their environments. He discovered that certain hippocampal and parahippocampal neurons, which he called "place cells," fire differentially as the rodents changed direction, constructing, thereby, a cognitive map of their environment. Subsequent, neurological research has shown that cognitive mapping has neural correlates not only in the hippocampal place-cell system (O'Keefe and Nadel 1978), but also in a grid-cell system centered in the entorhinal cortex, an area of the brain located in the medial temporal lobe.[12] Further, it has been shown that neurons in the middle temporal area of the visual cortex (MT neurons) not only respond preferentially to motion and orientation but also exhibit recall-related activity when activated—at least in monkeys (Albright 1984; Schlack and Albright 2007). Although Tolman's initial hypothesis of cognitive navigation for humans has been questioned by some (Roberts 2001; Dudchenko 2010: 26–30), it is now largely accepted by neuro- and cognitive scientists.

Since the number of possible neural circuits in the human brain exceeds the number of particles in the known universe (e.g., Edelman and Tononi 2008: 38), cognitive mappings of relationships in geographic and cosmic space constrain and tame the boundless wilds of neuroplasticity into a neurological network of specialized cells that encode for position and direction (Broadbent et al. 2004), a neural modeling of landscapes to which I refer as a human mindscape.

Although constrained by characteristics of physical geography (Kitchin and Blades 2002: 40, 57), humans typically orient themselves in the complex and vast spatiality of the actual, external world with cognitive maps. When, for example, we are first exposed to a complex environment, such as when visiting a new city or a foreign country, we generally consult a map in order to orient ourselves and to find our way around. Maps are not, of course, exact replicas of the new environment, otherwise they would be of no more use than that environment itself.[13] Rather maps are "simpler models" that encode public representations of selected, anchor landmarks of a target environment and their possible links and accomplish, thereby, a readily comprehensible representation of a complex environment (Pinheiro 1998: 335; Malkin 2011: 50–53).

A familiar example of a simplified representation of the environment is a subway map, especially for a large network as in New York or London. Subway maps do not indicate the actual distance between stops, nor the exact twists and turns the route may take, nor the precise angles between connecting routes. Rather they show what stations are on which route and indicate, by short path representations, in what order they may be reached (Craver 2007: 33; Shettleworth 2010: 296). While such maps are essential for any tourist seeking to navigate a strange network of underground transportation, those who regularly commute using that system will have encoded the relevant routes and stops into procedural memory as their cognitive map.

As the cognitive mappings of their spatial environment came to inhabit the minds of Mithraic initiates, an apprehension of geographic and cosmic space and of their orientation within that space was constructed as their eyes, their fixations and saccades, scanned the landscapes of the mithraea, gathering unconstrained sensory information about color, orientation, shape, light, and shadow. These stimuli are subsequently processed by the brain into the illusory construction that we experience as vision, and that is encoded in memory as perceived reality. "If we actually saw what our eyes take in" apart from this intuitive process of mental construction, cognitive psychologists Michael Hout and Stephen Goldinger conclude, "the world would be a chaotic place" (Hout and Goldinger 2013).

In addition to actual spatial orientation, cognitive maps can encode for abstract representations of space, that is, for representations of space that are independent of real-world perceptions (Kitchin and Blades 2002: 10; Hassabis

et al. 2009: 546–547, 551; Dudchenko 2010: 115–189). As surrogates for "real world" places (Pinheiro 1998: 322; Gribbin 2004: 103), such cognitive mappings of abstract space encode a range of cognitive and symbolic aspects of the environment in comprehensible and accessible modes (Pinheiro 1998: 322; Kitchin and Blades 2002: 1). Close to a century ago, political commentator Walter Lippman presciently observed that "[t]he real environment is altogether too big, too complex, and too fleeting for direct acquaintance … And although we have to act in that environment, we have to reconstruct it on a simpler model before we can manage with it" (Lippmann 1922: 16).

The only source of information for simpler representations of environments at scales that cannot be directly experienced is secondary (Kitchin and Blades 2002: 44)—as was the case for the geographical expanse of the Roman Empire and with the astronomical vastness of its Ptolemaic cosmos. In the conclusion of systems analyst Kenneth Boulding, such simpler representations of space embody "an extraordinary condensation of information" (cited by Wright 1988: 218), which locates all other relevant nodes within the same "condensed" geopolitical or cosmological frame of reference, regardless of actual place, time, and relationship (Kitchin and Blades 2002: 65). The architecture of all mithraea embodied such a secondary condensation of specifically Mithraic information, in which an anchored network of astrological nodes formally circumscribed a Mithraic microcosm. Their "reduced" but still complex network of technical astrological connections has now been mapped by Roger Beck (Beck 2006: 102–117; see also Gordon 1996). This intricate web of astrological "star-talk" would conceivably have been fully comprehensible only to a few Mithraic "scholars," possibly among the Mithraic *patres*,[14] even as the formal syntax of any language is only fully mastered by linguists. However, any ordinary Roman aspirant to Mithraic initiation, who had even a cursory acquaintance with the widespread system of popular astrology that was prevalent from the beginnings of the imperial period, would have discerned the basic distinctions between the perplexing Ptolemaic cosmos and the compressed, more accessible, mappings of the Mithraic astrological model. This minimal apprehension of the formal Mithraic cosmological syntax, now reconstructed by modern scholars, likely persisted throughout the hierarchical grades of Mithraic initiation as well, even as the full extent of large political or economic networks would only have been partially grasped by even by their most mobile agents. Owing to a mental bias of "cartographic realism"

(Blanchard 1995), the ecological, if anecdotal, information provided by simpler models influences decision making and behavior in that environment more than their unintelligible or perplexing "real world" counterparts (Kitchin and Blades 2002: 40, 43, 57), especially when there is an inadequate understanding of the actual physical environment. Consequently, cognitive mapping provided a powerful mechanism for psychological control and, thus, for propagandistic manipulations by the competing social, political, and/or religious ideologies that were characteristic of the Hellenistic period (Pinheiro 1998: 322; Pachis 2003). Such manipulations were enhanced by the emotional attachments that often play a role in spatial orientation (Kitchin and Blades 2002: 43).

These cognitive maps conferred a particular advantage upon the itinerant members of the Roman cult of Mithras, who were largely recruited from the Roman military or employed in its civil service, and who were, consequently, subject to frequent disorienting redeployments and reassignments throughout the otherwise bewildering geographic and cosmic spatiality of the Roman Imperial period.

Conclusion

I have argued that the landscape of the Roman cult of Mithras was characterized by the small world of, at least, a nascent geographical network as well as by a much more sophisticated cosmological web of astrological connections. Further, these geographical and cosmological worlds were ritually engendered among Mithraic initiates as a neurally encoded mindscape. Network theorists argue that such small worlds are "a generic property of networks in general" (Barabási 2003: 40), from the molecular, neurological level of organization (Koch 2012: 129), to that of historical social relations (Watts and Strogatz 1998: 440–442; Barabási 2003: 50; Malkin 2011: 16, 23, 26, 27; Hoffmann 2012: 116). As Albert-László Barabási has pointed out,

> species in food webs appear to be on average two links away from each other; molecules in cells are separated on average by three chemical reactions … [the 302] neurons in the brain of the *C. elegans* worm are separated by fourteen synapses. (Barabási 2003: 34)

The Internet, with its "hundreds of thousands of routers, has a separation of ten" and the publically indexable World Wide Web, estimated in 2008 to consist of some 800 million nodes, consists of but nineteen degrees of separation. *H. sapiens* society, a network of some six billion nodes, has, as we have seen, an intermediate separation of six (Barabási 2003: 50), and a separation of influence of but three. Network principles define very small worlds indeed—and, I have argued here that they are a property of the Roman cult of Mithras as well.

Given that Mithraism was transmitted by one cell being cloned from another, all Mithraic nodes would, by default, have been connected by, at least, one degree of influence to another. Further, network theory predicts that any connection among cells of the extensive network of Mithraic nodes, however undeveloped, would have been removed from one another by no more than six degrees of separation. Even though empirical data for the Mithraic network is minimal, it would nevertheless be of interest to attempt a reconstruction of that network in order to test that prediction.

I have argued, secondly, that the Mithraic mithraeum itself represented a microcosm explicitly constructed as a small-world model. At the minimalist level of interpretation, each mithraeum was constructed as a compressed "image of the [Ptolemaic] cosmos" (Porphyry) as indicated by the seven planets typically represented on its vaulted ceiling. However, the visual focal point of every mithraeum was the tauroctony with its specifically Mithraic astrological inflection of the larger Ptolemaic cosmos. This uniquely Mithraic representation of the cosmos provided initiates with their own "hitchhiker's guide to the galaxy" (*pace* Douglas Adams).

Finally, both the Mithraic social network and its microcosm, while not explicitly related to one another, came to inhabit the minds of Mithraic initiates as the neural nets ritually encoded by cognitive mapping. Together, these cognitive mappings of geographic and cosmic space allowed individual Mithraists to navigate the larger landscapes of the Roman Empire and to orient themselves within those landscapes and to one another. It was this Mithraic mindscape that afforded a Mithraic identity and that, in turn, provided the very possibility for a Mithraic network, that is, for a stabilizing pattern of movements and mental representation that, however, was never fully realized.

7

Cult Migration, Social Formation, and Religious Identity in Graeco-Roman Antiquity: The Curious Case of Roman Mithraism

> *[B]ecause the religious image [in the Roman world] is a means of legitimation, it must be stereotyped, reproducible: in an important sense divinity exists as image not as idea.*
>
> Richard Gordon (1980b: 222)

During the early centuries of our era, religious groups in the Roman Empire, both imported, such as the Graeco-Roman mystery cults,[1] and those newly formed, such as the various Mithraic groups and the early Christianities, migrated throughout the Roman Empire.[2] Given the entropic nature of information in transmission—including, perhaps especially, social information—the migration of any group, whether transgeographically or transgenerationally, problematizes the stability of its identity. And given the dynamics of dramatically increased commercial, political, and social mobility during the Roman Imperial period—a mobility resulting in matrices of complex cultural interchange often tautologically characterized as "syncretism" (Martin 2010)—we might question whether any collective identity attributed to such groups is simply the imaginative construct of ancient commentators and the re-imaginings of modern historians based on little more than, for example, the nominal evocation of a common deity, albeit in his or her localized theophany. If not, then exactly *how* any translocal cult identity was sustained by such groups in their diaspora must be explained. The Roman cult of Mithras provides an instructive case.

By the end of the second century, Mithraism had become the most widespread and densely distributed cult in the Roman Empire and the

most fulsomely documented. While this documentation includes no textual remains,[3] it does include an abundance of material evidence from some 400 known sites, including about 1,000 inscriptions, most dedicatory (Clauss 2001: xxi). One of these dedicatory inscriptions instantiates the general problem of cult transmission and identity in the Graeco-Roman world.

i

In 1910, a Mithraic dedicatory inscription was found on a stone that had been reused in an old wall in Palaiopolis: in classical antiquity the principal town on Andros, the most northerly of the Greek Cyclades. According to this inscription, dated from between 198 and 209 AD, Marcus Aurelius Rufinus dedicated (*constituit*) a *speleum*, or cave, to *sanctus deus invictus* (Saucius 1910; *CIMRM* 2350). *Deus Sol Invictus Mithras* was the cult title of and normal formula for dedications to the Roman deity Mithras (Beck 2006: 5) and *speleum* was a term for a mithraeum, or Mithraic temple, used almost exclusively in Italy or by Italians in the provinces (Clauss 2001: 42). Rufinus' inscription records that he was an *evocatus* in the Roman army, a veteran who had reenlisted or been retained in service at a higher rank and who was now a member of the elite Praetorian Guard.[4] Although Septimius Severus, Emperor of Rome from 193 to 211, had disbanded the Guard in 193 as unreliable and seditious, he subsequently restored and reorganized it under his own control (Herodian 2.13–14). Consequently, Rufinus dedicated the Andros mithraeum to the "well-being" (*salus*) of the "Emperor Lucius Septimius Severus"—and to his two sons, the Caesars "Marcus Aurelius Antoninus," nicknamed Caracalla, and "Publius Septimius Geta" (*CIMRM* 2350; Reed 1975; Clauss 2001: 37).

Rufinus was in command of three other Praetorians—Flavius Clarinus, Aelius Messius, and Aurelius Iulianus—who are named in the inscription as co-dedicators of the mithraeum. Their mission in Palaiopolis is unclear but it was possibly to serve as guards at a small camp for political prisoners or, perhaps, for a harbor installation (Reed 1975; Clauss 2001: 37), although the presence of an Isis cult at Andros, associated with commerce, would argue for the latter (Witt 1978). While the Praetorians were no strangers to Mithraism—

Mithraic remains having been found in the *Castra Praetoria,* their home barracks in Rome (*CIMRM* 397, 398)—the Andros inscription documents one of the few Mithraic sites to be discovered in the Greek-speaking part of the empire.[5] The Andros dedication, like the epigraphic evidence for Mithraism generally, underscores what scholars of Mithraism have long understood about the spread of Mithraism. Apparently unpopular in Greece, this Roman cult was nevertheless transmitted there, as it was elsewhere throughout the empire, largely by members of the military (Clauss 2001: 21–22, 34–37), which constituted much of the Mithraic membership, through their military reassignments and redeployments.

The Andros inscription was published in 1910, however excavations in and around the modern village of Paleopolis have not been undertaken and, therefore, the mithraeum itself has not been found (Witt 1978: 1332; *CIMRM* 2350). Although local and regional variations in the iconography of mithraea are characteristic of the Mithraic diaspora (e.g., Hinnells 1976), we can, nevertheless, confidently predict that when the Andros Mithraeum is discovered,[6] it will contain a faithful representation of the tauroctony: the ubiquitously consistent image of Mithras slaying a bull that is characteristic of every Mithraic site thus far discovered throughout the Roman Empire. In fact, the presence of a tauroctony, of which some 700 depictions are known (Clauss 2001: xxi), is generally the most prominent marker identifying archaeological sites as mithraic.[7] The rather complex tauroctonous image portrays:

> Mithras pinning a fallen bull with his left knee. With his face averted to his right, he pulls the animal's head back by its mouth, chin, or horns with his left hand so that its throat is exposed; with his right hand, he slays the beast with his knife or sword. A sheaf of grain sprouts from the bull's tail. A raven appears over Mithras's right shoulder, often perched on his cloak. A serpent and often a cup are ranged beneath the bull, while a dog laps at the fatal wound of the bull and a scorpion is attached to the dying animal's genitals. (Martin 1987: 115)

Usually sculpted in bold relief or painted as a vivid fresco, this standardized image was displayed prominently in the mithraeum, usually affixed or applied to its front wall and dominated Mithraic space by means of its large size relative to the interior dimensions of the mithraeum, or by such designs as pierced

reliefs that were dramatically illuminated from behind (*CIMRM* 267, 458, 847, 1241, 2053; Vermaseren and van Essen 1965: 346, #46).

In the midst of the social fluidity that marked the Roman Empire, the dedication of a mithraeum in Andros, which most certainly would have included a tauroctony, raises the vexing problem of how this rather complex identifying feature of Mithraic groups could be so faithfully transmitted throughout the Roman Empire by ordinary soldiers, who, as the faulty grammar of the Andros inscription betrays, were not even particularly well-educated (Reed 1975: 207).[8]

ii

Tauroctonies could, of course, have been commissioned by individual Mithraists from a knowledgeable artist or workshop. This seems to have been the case, for example, with the freestanding marble sculpture from the *Terme di Mitra* in Ostia (*CIMRM* 230).[9] However, it is unlikely that most Mithraic cells could have afforded the expense of such a commission and its transport. Further, most Mithraic reliefs are wrought from local materials while frescoes are, of course, painted *in situ*. While Roman artists did travel throughout the empire with copybooks of popular as well as decorative patterns, there is no evidence for the existence of any prototypical patterns for the tauroctony that might have been used by itinerate artists or craftsmen. There are, of course, surviving examples of tauroctonous representations that are small enough to have been transported relatively easily and used as models for larger reliefs or frescoes. However, these small tauroctonous images seem to have been themselves fabricated for use as cult images or for private devotional purposes. For example, a small bronze tauroctonous plate from the Roman camp at Szöny-Komárom in Hungary, which is of a size that might be readily transmitted, was nevertheless manufactured with small holes in each of the four corners whereby it might be attached to a wall (*CIMRM* 1727). A number of small (50 x 50 cm), thin (2–4 cm) marble tauroctonies were also manufactured, especially in Dacia, also intended for cult installations (Clauss 2001: 56). There were, of course, "small reliefs on stone, statuettes in bronze, silver and bronze plaques, representations on cult-

vessels, personal ornaments" and small gems bearing a tauroctonous image that might have served as portable and easily circulated models (Gordon 2004: 259, 263, 264–265), but the majority of these either don't conform to the stereotypical positioning of the compositional elements of the tauroctonies known from the mithraea or they are of a rather too poor quality to have provided sufficiently accurate models for the more detailed and complex cult tauroctonies (Gordon 2004: 266)—although, perhaps, they could have served as mnemonic prompts. In any case, Roman artists were recognized more for their improvisations upon original images than for their faithful copies (Perry 2005: Ch. 3). This point is well summarized by art and archaeology historian Roger Ling:

> Despite the use of pattern-books and the striking similarities between decorative motifs and figure compositions in far-flung regions of the Empire, hardly any two … were identical … Moreover, when repetition does occur, the motif or motifs in question are often used in a different way or in a different position, or the basic color scheme is changed. (Ling 1991: 220)

And, like the financial constraints upon the commissioning and transport of tauroctonies from some artist's studio, it is doubtful that most Mithraic cells could have afforded the expense of transporting a knowledgeable artist or craftsman to their locale, especially to provincial regions of the empire, and supporting him during his creative residency. Surely the limited resources of a small contingent of guards stationed at a remote outpost like Andros would have precluded the employment of any outside consultants for the faithful replication of the tauroctonous image. Whatever the material resources necessary for the founding and construction of a mithraeum and of its identifying cult image, it is clear that this undertaking remained a local matter.

In a distant and largely non-Romanized part of the empire, Rufinus and his three colleagues were on their own, with few resources from which to construct their mithraeum and apparently with no external text or template that would provide the necessary instruction or model for doing so. And although we may assume that Rufinus and his colleagues, as co-dedicators of the Andros Mithraeum, were Mithraic initiates, there is no evidence for which level of initiation they might have attained nor that any of them had any special status as Mithraic religious specialists (Nock 1952: 248).[10] There

is, in other words, no satisfactory historical explanation for the (presumably) faithfully executed tauroctonous image on the island of Andros—or elsewhere in remote areas of the empire.

I would like to suggest that where historical evidence is fragmentary—which is, of course, the case (to a greater or lesser degree) with all historical evidence, then historians presume to fill-in-the-gaps of their historiographical reconstructions by employing theoretical models—whether explicitly or, as is more often the case, implicitly. Further, I would argue that explicitly employed theories, especially those that have been empirically tested, might supplement traditional historiographical methods better than implicitly employed or untested models. As the New Testament scholar Robin Scroggs argued some three decades ago:

> If our data evidence some *parts* of the gestalt of a known model … we *may* cautiously be able to conclude that the absence of the missing parts is accidental and that the entire model was actually a reality. (Scroggs 1980: 166; cited by Stark 1996: 23)

The empirically tested theories of the cognitive sciences, which identify and explain historical data that have been produced by ordinary processes of human minds, provide such a model.

iii

In 1965, Chester Starr wrote in his *History of the Ancient World* that if one is to understand "any era of the past one must be able to penetrate into the minds of its inhabitants" (Starr 1965: 27). During recent years, a number of historians have begun to employ the resources of evolutionary theory and of the cognitive sciences in their attempts to do so. Their objective is to understand (and to explain) the role of historical agents' minds in the production and transmission of those cultural representations, whether textually or materially inscribed (as was the Mithraic tauroctony), that have survived to comprise "historical data."

Evolutionary and cognitive psychologists have shown that the human mind is not a blank slate upon which some stable corpus of cultural information

may simply be inscribed.[11] Rather, culture is made up of information that is transmitted from individual mind to individual mind, and, in the process, is transformed by those minds (Sperber 1996: 1), sometimes unrecognizably so. The problem with the transformation of information in transmission is illustrated by the simple—if simple-minded—children's game of "Telephone." Known in the UK as "Chinese whispers," in France as "*le téléphone arabe*," in Italy as "*telephono senza fili*," in Germany as "*Stille Post*," in the Czech Republic as "*tichá pošta*," etc.,[12] this seemingly universal game illustrates the tendency of information to become increasingly degraded in transmission. This entropic tendency is perhaps retarded but not eliminated by the development of writing, as historians of manuscript traditions have shown, nor has it been purged by the introduction of print, as readers of even carefully copyedited books will attest.[13]

In the absence of textual preservations of information, as in the Mithraic traditions, the transmission of information would have been oral and its retention would have depended on memory. As the cognitive psychologist David Rubin has noted, "memory is exceptionally good [for some tasks]; for others, it is remarkably poor. It is likely that oral traditions developed to make use of the strengths and avoid the weaknesses of human memory" (Rubin 1995: 10).

Historians, especially classicists and biblical scholars, have long emphasized the ability of mnemonic specialists within oral traditions to memorize extensive narrative materials and to recall them verbatim—though mnemonic supports are required (e.g., Rubin 1995; but see Small 1997: 3–10). Because of their narrative (and textual) bias, however, historians have generally neglected to consider the faithful transmission of visual materials. If the entire corpus of Homeric poetry can be memorized and accurately recalled, as can that of *Tanakh* or *Qur'an*, why should the mnemonic transmission of visual representations be any more problematic? In fact, experimental evidence suggests that the transmission of visually organized information, the primacy of which is characteristic of religions in antiquity generally (Clauss 2001: 17), is more resistant to subsequent influences of suggestibility than is verbal information (Pezdek and Greene 1993; Rubin 1995: 49–52; Slone et al. 2007)—despite expectations by some cognitivists to the contrary (e.g., McCauley and Lawson 2002: 46). In fact, such evidence indicates that any attempt to verbalize

visually transmitted information actually impairs "holistic non-verbal" recall (Schooler and Engstler-Schooler 1990; Schooler and Screiber 2004: 25).

Cognitive scientists have explored ways whereby some information—narrative, whether oral or written, as well as visual—is stabilized in its transmission from mind to mind and, consequently, resists entropic degradation. These include: (a) the activation of endogenous structures of cognitive attraction which tend to stabilize transmitted information in constrained ways; (b) ecological attractors which help to organize—and to constrain—relations among the transmitted information; and (c) techniques of enhanced memory. In the absence of any evidence for instructive texts or artistic templates among the Mithraic traditions, these cognitive processes can contribute insights into the historical problem of how the Mithraic tauroctony was so faithfully disseminated.

Cognitive attractors

The Mithraic tauroctony could only have been viewed as a Roman representation of the widespread human practice of blood sacrifice (Turcan 1981; Clauss 2001: 81–82; Lewis-Williams 2010: 189),[14] a practice which the classicist Walter Burkert considers to be "at the very heart of religion" (Burkert 1983: 2). And since sacrifice was, of course, a central feature of official Roman religion (Beard et al. 1998: 36; Turcan 2000: 103), it would have provided a particularly salient and inferentially rich image for Roman minds. Representations of sacrifice are confirmed specifically for the Mithraic context by several contemporaneous commentators, although they differ as to whether the sacrifice was *to* Mithras, was *taught by* Mithras, or was *performed in the name of* Mithras (Martin 1994b: 218).[15]

The cognitive anthropologist Dan Sperber has suggested an "epidemiological" explanation for cultural transmission whereby such domain-rich information as represented by the tauroctonous scene spreads contagiously among minds because of its attraction to evolved cognitive defaults. As Sperber puts it, these cognitive "adaptations to an ancestral environment … tend to fix a lot of cultural content in and around [specialized] cognitive domains" (Sperber 1996: 113; see Sperber and Hirschfeld 2004), both within populations as well as across generations (Claidière and Sperber

2007: 91). These cognitive attractors—or "domain-specific expectations" (Boyer 2009: 292)—establish a probabilistic bias for the stabilization of transmitted information (Sperber 1996: 112). Such stabilizing evolutionary and cognitive defaults are increasingly being recognized by critics as shaping recurrent themes in art (e.g., Appleton 1996) and literature (e.g., Gottschall and Wilson 2005; Flesch 2008), by musicians as constraints upon the communication of emotions and ideas (Levitin 2009), and by historians as establishing the purduring concerns of historical agents (e.g., Hanlon 2007). Following Sperber's conjecture, a cognitive contribution to an understanding of the faithful transmission of the Mithraic tauroctony will first ask what cognitive attractors such a sacrificial scene might have activated.

Whatever the justification offered for performing sacrifices—and historians of religion have documented a myriad of reasons—a plausible intuitive attractor for the ubiquity of such rites is based in evolved biases for human sociality (Boyer 2001: 243). In the words of the classicist Walter Burkert, sacrifice "celebrates the commensality of men in the presence of the sacred" (Burkert 1996: 150; see Lewis-Williams 2010: 249). As expressed in the seemingly universal formula of relationship with one's god, *do ut des* (Burkert 1996: 130, 136–138; Durkheim 1915: 388; van der Leeuw 1920/21), this ritualized social relationship specifically activates default expectations about an economy of exchange (e.g., van der Leeuw 1920/21) that is based on the principle of reciprocity—a principle observable even among primates (Burkert 1996: 129–155). This principle of reciprocity can be manifest as an actual exchange of resources among participants, or as a potential exchange with invisible partners (Boyer 2001: 242; Atran 2002: 115). The sacrificial exchange is mnemonically reinforced by predictable visceral reactions of disgust and/or an accompanying emotional salience universally evoked by the letting—even the sight—of blood (McGaugh et al. 2000: 1081; Curtis and Biran 2001: 21; McGaugh 2003; Pizarro et al. 2006: 78; Lewis-Williams 2010: 245), a reflexive response possibly based in evolved mechanisms for pathogen avoidance (Tybur et al. 2009: 105, 110). And since the tauroctonous representations of sacrifice may have violated the "normal" rules of Graeco-Roman practice (Turcan 1981; Gordon 1988: IV, 64–69), such violations of normal expectations would, according to research by Pascal Boyer, have supported, thereby, its memorability (Boyer 2001: 80–87).

While the cognitive attractor theory would have accounted for the general attraction of Roman minds to portrayals of sacrifice, its cognitively optimal function, which stabilizes relatively little contingent information, would have been insufficient to have secured the informational specificity of the relatively complex Mithraic composition. And although Sperber's proposal about the establishment of conditional probabilities for the stabilization of information in transmission by attraction to evolved cognitive defaults has anecdotal appeal, it has, to my knowledge, not been tested experimentally nor assessed against natural frequencies of transmission found in history or ethnography,[16] an opportunity for historians of religion to make a contribution to scientific theorizing.

Ecological attractors

In addition to representing sacrifice, the tauroctonous image has been identified for its Mithraic context as an astrologically configured star-map, in which each of its compositional elements corresponds to well-known constellations: the bull to Taurus, the dog to Canis Minor, the serpent to Hydra, the scorpion to Scorpio, the cup, when present, to Krater, and the wheat emerging from the tail of the bull, to the star Spica (Ulansey 1989; Beck 2006: 31–32, 190–200; for an exploration of the symbolic significance that may be associated with these compositional elements, see Gordon 1980a: V, 25). Since a popular knowledge of astrology informed virtually all religious expressions at the beginning of the Roman Imperial period (Cumont 1960: 32, 51–52), a recognition by Mithraists of the tauroctony as a familiar cosmic structure—or, in the absence of this recognition, its "revelation" as such to initiates—might well have served as a feature of its transmission by organizing activated endogenous attractors into a readily recognizable representation, an example of a common "ecological attractor," as it were (Gaddis 2002: 9, 55). Such ecological attractors can discriminate the target of recall from other contents in memory (Rubin 1995: 170) so they might more efficiently and effectively interact and operate in tandem with endogenous cognitive attractors to aid in stabilization and transmission (Sperber 1996: 115).[17]

In his now classic study of "the selfish gene," Richard Dawkins (1989) proposed that a faithful transmission of such complex units of cultural

information as the Mithraic tauroctony might be understood by analogy to that of biological information transmitted by genetic inheritance; he coined the term "meme" to name these cultural units of information (Dawkins 1989: 192).[18] "Just as genes propagate themselves in the gene pool by leaping from body to body via sperms or eggs, so," he suggested, "memes propagate themselves … by leaping from brain to brain via a process which, in the broad sense, can be called imitation" (Dawkins 1989: 192). Although Dawkins' proposal has attracted some interest within cultural studies, it has received less acceptance from the scientific community. This is largely because no one has been able to specify what a "cultural unit of selection" might be with anything approaching precision, nor has anyone specified the replicatory mechanisms of that transmission, whereas, in the analogical field of genetics, the mechanisms of genetic transmission are now being specified at the molecular level (Kingsley 2009).[19] However, in a variation on the game of Telephone, Dawkins imagines an experiment concerning the faithful transmission of images that is perhaps relevant to that of the Mithraic tauroctony.

Rather than the transmission of verbal information, Dawkins imagines an experiment in which people transmit actual procedures for constructing an object. He models this experiment upon one of his schoolboy skills for making a paper boat, a proficiency in simple origami skills that is perhaps shared by school children around the world. Dawkins learned the procedure for making paper boats from his father who, in turn, had acquired the skill from the school matron at his boarding academy. A craze for making these boats had spread throughout his father's school and then, as Dawkins remarks—with a metaphor reminiscent of Sperber's view of cultural transmission—it died away "like a measles epidemic." Dawkins recounts his visit to the same school, some twenty-six years later, where he reintroduced the boat-making craze, "and it again spread, like another measles epidemic, and then again died away" (Dawkins 2006: 193).

Dawkins concludes that since "the origami skill consists of a series of discrete actions, none of which is difficult to perform in itself … it will be clear to the next … [person] down the line what he is *trying* to do." Dawkins predicts that not everyone will succeed in passing the skill intact down the line, "but that a significant number of them will" (Dawkins 2006: 194). His point is that the actual procedures necessary to produce an image will be transmitted

with a great deal of fidelity, or not at all, whereas verbal information *about* an image—as in Telephone—will be transmitted poorly, if at all. Dawkins refers to this successful transmission of actual procedures for the construction of images as their "self-normalizing" character (Dawkins 2006: 195). Might not the astrological structure of the Mithraic tauroctony have endowed it with a "self-normalizing" structure that provided Roman minds—especially those of Mithraic initiates—with a more readily recalled visuospatial template?

The self-normalizing mnemonic structure of the Mithraic tauroctony was further reinforced by the universal architectural features of mithraea, which, like that at Andros, were built as a cave or cave-like structure. These caves (*spelea*) represented, according to Porphry, an *eikona tou kosmou*—an "image of the cosmos" (*de antro.* 6, 18), from which, it is said, souls descended and to which the souls of Mithraic initiates ascended (Porphry *de antro. 23–24*). And, indeed, the vaulted ceilings of mithraea were often decorated in ways that suggested the seven (visible) planets of the heavens. Such supplemental forms of spatial organization are mnemonic aids that would have been especially useful in stabilizing the tauroctonous image for their faithful transmission (Rubin 1995: 62).

The astrological organization of the mithraeum, like that of the tauroctony, would have evoked modes of spatial cognition familiar from common Graeco-Roman mnemonic techniques—the well-known Greek technique employing *topoi* or that of the Roman strategy using *loci* (e.g., Rubin 1995: 46–48; Small 1997: 81–116). In addition, spatial cognition facilitates the communication of information by maps (Liben 2001: 46), and the solving of certain problems, especially by encoding order, both spatial and temporal (Gattis 2001a: 2; Liben 2001: 45, 74; Tversky 2001: 111; for Mithraism, see Beck 2006: 200–206).

Further, spatial representations naturally available from a shared environment may serve to reinforce those mentally generated by individuals. In other words, the way in which people come to think about, and remember, their world is also affected by their perception of (mapped, ordered) representations of the world (Liben 2001: 45–46). So, for example, the tauroctonous representation overcomes an innate categorical distinction between animate and inanimate things (Gelman 1999: 129; Spelke 1999: 403), to "animate" realist or materialist appraisals of the cosmos by representing

celestial reality as astrological and tauroctonous images of living creatures. Such animations of the world—especially by anthropomorphic but also with theriomorphic representations—are, of course, a natural proclivity of human minds as well as a hallmark of religious mentation (Guthrie 1993).

The spatial organization of information represented by the tauroctony would have been especially amenable to the male membership of Mithraism as would certain visuospatial skills with which "male minds" and their relatively elevated levels of prenatal testosterone (Baron-Cohen 2003: 101) are statistically correlated (Kimura 1999: 43–66; Sherry 2000). Presumably, these skills are based on motor adaptations that had an evolutionary history in such ancestral male pursuits as hunting (see, e.g., Kimura 1999: 31–41; Guthrie 1993: 228–240, 257–265)—judging the position of moving targets, for example (Law et al. 1993), and accurately aiming projectiles at them (Baron-Cohen 2003: 79–80; Ecuyer-Dab and Robert 2004; Lawton and Hatcher 2005: 722; Holmes 2008: 39–40). Like the mental association between sacrifice, blood, and violence (Hewitt 2010), concern with such spatially facilitated performance skills would have been of particular significance for the large number of Mithraic initiates who were also members of the military and for whom the cult had a special attraction (Clauss 2001: 36).

Recall of consolidated memories is a process that generally serves to maintain and strengthen those already stored in long-term memory. However, the retrieval of a memory trace also can cause a labile phase that requires an active process to stabilize the memory (Tronson and Taylor 2007). This stabilizing process would have been realized in Mithraism by successive stages of initiation during which consolidated memories of the tauroctony not only would be vividly recalled but also more accurately reconsolidated (Roediger et al. 2009: 165).

As I have argued elsewhere, the cumulative effects of multiple stages of Mithraic initiation may have resulted in a kind of locally shared "street smarts" (Martin 2009: 289, n. 14).[20] In contemporary urban landscapes, such street smarts are associated with countercultural groups—like the Graeco-Roman mysteries—whose often complex and invariable graffiti have—like the Mithraic tauroctony—been associated with emblems of group identity. In addition, these contemporary graffiti have been interpreted as asserting values of masculinity (e.g., Brown 1978; Alonso 1998; Macdonald 2003; Tierney 2005),

which is suggestive given the exclusively male membership of Mithraism.[21] As with contemporary gangs, a Mithraic "street smarts" would have provided a pedagogical alternative to the standard corpus of knowledge acquired through formal education and, consequently, would have involved the transmission of information based on cognitive processing different from that associated with the reflective knowledge of formal education.

Enhanced techniques of memory

The cognitive anthropologist Harvey Whitehouse is less concerned with the transmission of religiously minimal information, such as that which would tend to be fixed by the activation of cognitive and/or ecological attractors, than he is with the transmission of complex or cognitively costly information that exceeds cognitive optimality and that is characteristic of such established religious groups as the Mithraic. Consequently, he argues that, in addition to the probabilistic attractions of cognitive biases and an organization and mnemonic reinforcement of their relationships by ecological patterns, the transmission of complex information—such as that represented by the Mithraic tauroctonous scene—requires enhanced mnemonic supports (Whitehouse 2004: 49–59). Whitehouse proposes that the frequency of ritual performance, by which complex information is transmitted, encodes two different human memory systems, the semantic and the episodic. Information preserved by these memory systems results, upon recall, in divergent modes of religiosity, which he terms "doctrinal" and "imagistic."

For Whitehouse, the doctrinal modality refers to the transmission of religious information that has been reflectively encoded as sets of coherently formulated teachings and arguments. As in much formal education, calculus, for example, this information must be strengthened and transmitted by persistent repetition; otherwise, the information will indeed become debased. If, however, such "doctrinal" knowledge is reinforced by recurrent and regular instruction, then that information tends to become encoded and consolidated in long-term semantic memory as generalized conceptual schemas. And if such conceptual schemas become controlled by a centralized hierarchy, they can be widely and accurately disseminated by authorized teachers or missionaries. Because of this widespread distribution of standardized information,

adherents to such uniform or orthodox teachings become members of large-scale or "imagined" communities (Anderson 1991), such as the "Christian" (Whitehouse 1995: 194–199; 2004: 65–70). And as anyone who has ever visited a Christian supply store or pilgrimage site recognizes, a standardized imagery is supported by and remains a characteristic of such doctrinal traditions.

Official Roman religion during this period well corresponds to Whitehouse's model of doctrinal religion on virtually every point except that—as is well-recognized—official Roman religion is not characterized by any coherent and well-argued set of beliefs but is distinguished, rather, by a system of ritual orthopraxy (Price 1984; Hopkins 1999: 24). As with Whitehouse's doctrinal modality, however, the Roman ritual system was supervised by a hierarchy of religio-political authorities—domestically by the *paterfamilias*, socially by the *magister* of the *collegia*, and at the state level by public priests. And, according to Pliny, all the "fixed and formal" practices of Roman religion after 12 BC became subject to prescribed and precise regulations (Plin. *hn* 28.11), which, according to the first-century historian Valerius Maximus, were controlled by "the knowledge of the *pontifices*" (Val. Max. 1.1.1a-b). This carefully prescribed, regularly repeated, and routinized system of ritual practices functioned cognitively to encode official values of "Romanness" (Turcan 1996: 195) into the semantic memory of its practitioners. These values were not encoded as cognitive schemas, as Whitehouse insists is necessary to the doctrinal modality, but by means of scripts, the designation for cognitive templates that organize information by means of inferentially rich sequences of action (Brewer 1999: 729). Scripts are especially apt for preserving and transmitting the sequences of concrete actions that are central to ritual systems (Rubin 1995: 11). On the basis of their repetitive and routinized transmission there would seem to be no functional cognitive difference between the encoding of information into semantic memory as either schema or script and, therefore, between Whitehouse's hypothesis of doctrinal orthodoxy and official Roman orthopraxy (Griffith 2009).

Unlike "doctrinal" modes of religiosity, with their centralized control and stabilization of information and the repeated encoding of that information in the semantic memories of widespread, anonymous communities, Mithraic cells retained a local autonomy that argues against any "official" monitoring

of a standardized dissemination of such identifying features as the Mithraic tauroctony (Martin 2007: 49–50).[22] Rather, the suite of features characteristic of the Roman cult of Mithras—as of the Graeco-Roman mysteries generally—corresponds well with those initiatory cults that provide the models for Whitehouse's imagistic modality (Whitehouse 1995: 194–199; 2004: 70–75; Martin 2005). For Whitehouse, this imagistic modality refers to the transmission of religious information that has been analogically encoded in the individual memories of initiates as a consequence of the high sensory pageantry and the emotional salience that are characteristic of such rites. Although analogue systems, especially as represented in imagery, are unsuited for the preservation and transmission of abstract concepts or claims to universal truths, they are most useful for organizing and manipulating visual and spatial information (Rubin 1995: 40, 62) and for capturing feelings and subjective interpretations (Levitin 2009: 16). Such "[s]patial schemas provide organization, and organization—particularly organization that links elements together the way spatial schemas do—improves memory" (Cofer 1973; cited in Gattis 2001b: 2). In fact, such spatial (or analogical) representations may well form the scaffold upon which episodic (or autobiographic, in contrast to semantic) memories are constructed (Hassabis et al. 2009: 551).

Since there is nothing inherently persuasive or compelling about analogies, the inferential—or "revelatory"—potential of such information is high. Such inferential conjectures become encoded in the episodic memory system of individual initiates as *personally* relevant information. Upon recall, this information tends to be "exegeted" by new initiates in "spontaneous reflections" (Whitehouse 1995: 198), which, when shared and reconciled with those of fellow-initiates, remain local—or at best, regional—constructions.[23] Such shared "revelations" have for collaborating initiates the same neurophysiological underpinnings and much of the same veridicality as actual events (Rubin 1995: 41–46; Schnider 2008: 194).

A central feature of episodic memory is that it fosters a relatively accurate retrieval of contextual information, such as those concerning fellow-initiates. The centripetal focus of the contextual frame constrains participants into small face-to-face communities. Since shared information remains confined to local groups, transmission by such groups of that information is primarily transgenerational and no "dynamic leadership"—in Whitehouse's

sense of "proselytizing leaders" who disseminate "religious truths" transgeographically—ever develops (Whitehouse 1995: 198).[24]

Whitehouse's two-modes theory has been assessed and generally well-received by a number of ethnographers and historians (Whitehouse and Martin 2004; Martin and Pachis 2009), and seems to be supported by recent neurological findings as well.[25] I—and others—have found it to be particularly valid for modeling the religious situation of the Roman Empire generally and of the Graeco-Roman mystery religions in particular (Martin 2005).[26] Unquestionably the emotional salience associated with the mystery rites of initiation would have provided mnemonic enhancement for the retrieval and transmission of information, not only concerning fellow-initiates, but also about details of the initiate's ritual ecology as well, especially about such contextually prominent displays as the tauroctony. However, the strategies of transmission associated with the imagistic modality are, in and of themselves, insufficient fully to account for the transmission of such complex and seemingly standardized information. Rather, the personal and local constraints on religious truths and the periodic and contingent dynamics of in-group transmission by the small-scale societies that are characteristic of imagistic modalities limit any explanation by this modality for the widespread and faithful transmission of such complex representations as the Mithraic tauroctony.

Conclusion

In the absence of any central administrative monitoring and of any evidence for instructive texts or artistic templates for the Mithraic tauroctony, its faithful transmission must have relied largely on the memories of its initiates. Mithraic rites of initiation would have established multiple constraints that would have facilitated mnemonic support for this faithful transmission: first, by exposing initiates to the tauroctony, a representation of sacrifice which is attention-grabbing as well as stabilizing because of its appeal to innate cognitive attractors that are common to all humanity as a result of our common evolutionary history; second, by "revealing" to initiates that this same representation was a star-map, an ecological attractor, which offered initiates

a specifically Mithraic cosmological frame that provided an alternative to the parallel cultural cosmological frame; and finally, by emblazoning in the episodic memories of initiates the Mithraic specifics of this tauroctony as a consequence of the high sensory pageantry associated with the Mithraic initiation rites (Martin 2005), and then in their long-term memory as a consequence of multiple levels of initiation and of their participation in ritual meals which supported a discussion and a consolidation of their individual "exegetical reflections" in terms of the schematic construction of the tauroctony.

The results of modern memory research have been summarized by psychologist Anthony Greene as a recognition that "the brain is wired to recognize and organize coherent connections, not arbitrary ones" (Greene 2010: 28). Connections, such as those between endogenous and exogenous attractors, between the tauroctony and the physical space of the Mithraeum, between these spatial representations and astronomical and astrological configurations, and between certain gendered behavioral biases and social (Mithraic) relationships, help to "anchor [in memory] an ever more complicated body of knowledge about how the world works and negotiate [its] complex structures" (Greene 2010: 28, 29). These shared cognitive biases and mental representations, materially represented in the Mithraic tauroctony (and in the mithraeum itself), provided a template that embodied several fundamental Mithraic axioms (or motifs or themes) (Beck 2006: 5–6) upon which local "religious truths" might be constructed by the diverse Mithraic associations.[27]

The widespread but stable transmission of such a complex representation as the Mithraic tauroctony cannot be explained in terms of any centralized hierarchical control, which Mithraism lacked, nor can it be explained by either of the cognitively based hypotheses of Sperber, Dawkins, or Whitehouse. The cognitive processes and constraints they identify, however, may be sufficient to provide, *in concert*, a robust explanation for the curiously faithful transmission of the Mithraic tauroctonous image, even to such a remote location as Andros and by such unlikely representatives of cult continuity and identity as Rufinus and his colleagues.

8

The Amor and Psyche Relief in the Mithraeum of Capua Vetere: An Exceptional Case of Graeco-Roman Syncretism or an Ordinary Instance of Human Cognition?

The "main characteristic feature of Hellenistic religion[s]" such as Mithraism has been described as "syncretism"—as has the entire Hellenistic age (Grant 1953: xiii). However, the utility of this category of syncretism, usually understood as some sort of mutual influence upon a religious practice or representation by two (or more) cultures in contact, is contested. If employed as an explanatory category, as it often is, it explains nothing. From a historical perspective, *all* religions are syncretistic, that is, constituted out of temporal antecedents and influenced by contemporaneous contingencies. Even when used as a descriptive category, consequently, "syncretism" is simply the redundant naming of a historically constructed conundrum to be explained (Martin 1983; see now Leopold and Jensen 2004 for an excellent historical and theoretical overview of uses of this notion). If, then, we begin with the notion of Hellenistic syncretism as a problem to be explained, the Amor and Psyche relief in the Mithraeum of Capua Vetere, the only known presence of these popular Greek figures in a sanctuary devoted to the Roman deity Mithras, would appear to present an exceptional case indeed.

The Amor and Psyche relief in the Mithraeum of Capua Vetere

The small (32 × 36 cm), white marble relief of Amor and Psyche in the Mithraeum of Capua Vetere portrays the nude, winged child Amor leading the larger female (adult) figure of Psyche, also winged, by the light of his

torch (Figure 8.1). He grasps Psyche's left arm with his right hand while holding the torch in his left (*CIMRM* 186: see Merkelbach 1984: 296, Abb. 27; Vermaseren 1971: 23 and Pl. 20). Psyche wears an ankle-length diaphanous dress, the hem of which she holds in her right hand. As in conventional representations of the pair, the wings of Amor are birdlike, while those of Psyche are those of the butterfly. Unlike conventional representations, the feminine attributes of Psyche have been moderated giving her a more masculine appearance (Merkelbach 1984: 82). The relief, highlighted by a red border painted on the wall around it, was probably inserted in the wall of the Mithraeum during its first period of use, that is, during the early to mid-second century AD (Vermaseren 1971: 49–50; 50, n. 1).

Little discussion has been devoted to the significance of the Capuan Amor and Psyche relief. Reinhold Merkelbach considers Psyche to be a representation of the enigmatic "nymphus," the second grade of Mithraic initiation (Merkelbach 1982: 24; 1984: 88–92) and Amor to be that of Heliodromus, the sixth grade of the initiation (Merkelbach 1984: 92)—though he offers little evidence for these conclusions.[1]

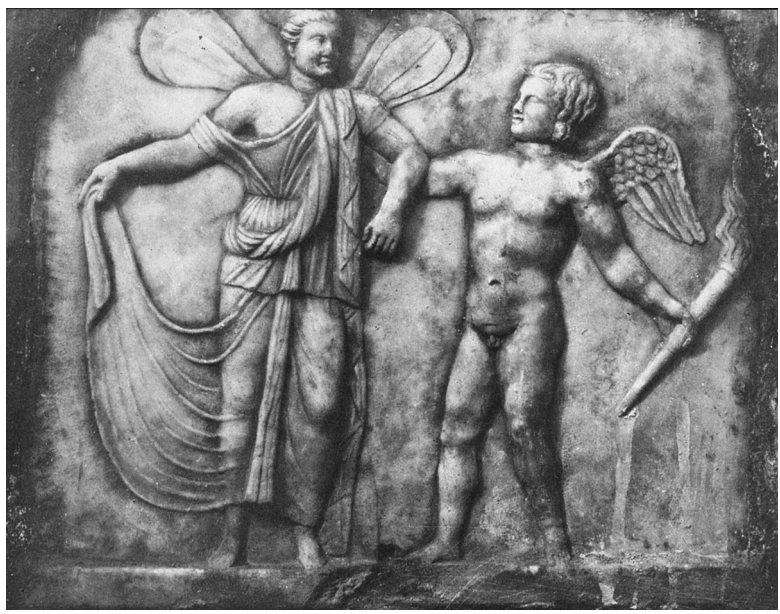

Figure 8.1 The Amor and Psyche relief in the Mithraeum of Capua Vetere
Photo by Patricia A. Johnston

More interestingly, Richard Gordon emphasizes that the position of the relief in the Capua Mithraeum is above a niche at the longitudinal center of the left (southern) bench of the Mithraeum. He suggests that such niches, which mark the center of benches along the two side walls in virtually all Mithraic temples, represent the solstices that, according to Porphyry, are the gates by which souls enter and depart the cosmos (Porph. *de antro.* 2). Following Porphyry, Gordon argues that souls descend into this world of being through the "northern" gate and re-ascend into dissolution through the "southern" gate (Porph. *de antro.* 24–25)—"North" and "South" referring here to the astrological orientations of the cosmos represented in the formal structure of Mithraic temples and not to the actual cardinal points (Gordon 1996: IV, 56). In this astrological interpretation, the Capuan Amor and Psyche relief is located above the niche marking the "northern" portal of the soul's descent (Gordon 1996: IV, 56–58; so also Beck 2000b: 162, n. 69). While Eros (Amor) is traditionally associated with freeing the soul from the conditions of this existence (Schlam 1976: 31), the implication of the Capuan relief is that the descent of the soul is under the guidance of Amor as well. Indeed, Porphyry characterizes the north winds, which he considers to assist in this descent of the soul, as *erōtikos* (Porph. *de antro.* 26; Gordon 1996: IV, 56–58). This descent of the soul and its subsequent trials may represent a process for its purification for which initiation into the mysteries is an analogue (Schlam 1976: 19).

The possibilities of historical (syncretistic) influences on the Capuan Amor and Psyche relief within Magna Graecia

Already, Hesiod had elevated Eros, one of the oldest of the gods, into a cosmic principle that was all-powerful over younger gods and men (Hes. *Theog.* 118–120). Similarly, the fifth-century BC philosopher Parmenides of Elea presented Eros as first of all the gods (Parm.13) and, consequently, as the cosmic power of love and procreation. Following Parmenides' logic that "there can be no real coming to be nor passing away" (Parm. 2; Burkert 1985: 319), a monistic view of the soul follows that is similar to that reported of Mithraism by Porphyry (Porph. *de antro.* 25; cf. e.g., Plato *Phd.* 79 C-D). Of course, this view

of a cosmic descent and re-ascent of an immortal soul was, in some form or another, an increasingly common feature of Hellenistic religions, culminating in neo-Platonism.[2]

A further possible association of the Amor and Psyche relief in the Capua Vetere Mithraeum with the Eleatic tradition of Parmenides is that its representation of Amor leading Psyche by torchlight is an apparent allusion to representations of initiation into the mysteries. In the *Proem* of his poem (Parm. 1), Parmenides seems to employ such representations of initiation to articulate his understanding of the unity of contrasts, such as that between death and life (Nussbaum 1996: 1113, see Parm. 19).

Parmenides' native city, Elea (modern Castellammare di Velia), was one of the first Greek colonies of Magna Graecia. Although conquered by Rome in 290 BC, Elea retained its Greek culture until the first century AD (Lomas 1996: 516). The city is but 153 km (ninety-four miles) southeast of Capua. Thus, an influence upon the Mithraic community of Capua by an Eleatic tradition about a procreative and initiatory figure of Eros presiding over a cosmic descent/ascent of the eternal soul is a historical possibility.

Further, the earliest Greek monuments representing Amor and Psyche also expressed a view of the immortality of the soul (Schlam 1976: 25), and the earliest representations of the pair are from the Greek cities of Magna Graecia, although the wings of the female figure accompanying Eros are those of a bird (Schlam 1976: 5). Portrayals of Psyche with butterfly wings, as on the Capuan relief, first appeared in the Crimea in the late fourth or early third century BC but became increasingly popular during the Hellenistic period, as documented, for example, by numerous instances in the vicinity of Capua, for example, in nearby Pompeii (Schlam 1976: 20–21).

If the Capuan relief was influenced by ideas about the descent and ascent of an immortal soul derived from the Greek Eleatic tradition, this influence would support Gordon's interpretation with reference to the location of the relief in the Mithraeum. And this influence would also introduce a relationship between this view of the soul and the figures of Amor and Psyche, a relationship documented also from the material culture of Magna Graecia.

If, however, the Amor and Psyche relief represents the possibility of Greek influence within the Mithraic community of Capua, its masculinized figure of Psyche seems to reflect a Mithraic influence upon this classical motif, as well—an expected modification by a cult that excluded female participants (Gordon

2005: 6090).[3] And if this relief is a re-representation of a classical motif in a way that reflects specific aspects of Mithraic practice, then it must be an intentional representation that cannot be explained as a random consequence of cultural contact (syncretism), or dismissed, as in the conclusion of Gordon, as a "marginal gloss" (Gordon 1994: 121, n. 88).

Historical evidence outside of Magna Graecia for Mithraic associations with Amor and Psyche

While rare, there is some documentation for associations between Amor and Psyche and Mithras apart from that of the Capuan relief. For example, a fragmentary statue of Amor and Psyche was found in the Mithraic excavations at S. Prisca in Rome. It is not known, however, whether this statue was associated with the Mithraic community there or whether it was simply "fill" from the demolition of an earlier structure. As the Roman architect Vitruvius noted, stone from demolished buildings, including sculpture, were often broken up and used in the concrete foundations of new construction (Vitr. 6.8.1–7). The excavators of the S. Prisca Mithraeum, Maarten Vermaseren and Carel van Essen, simply describe the statue as one of the "[s]tray finds from the right hand part of" one of the side rooms off the Mithraeum proper (Vermaseren-van Essen 1965: 476; 478, no. 275). The significance of this find, therefore, while suggestive, is inconclusive.

Of more interest is the "Tale of Amor and Psyche," the centerpiece of Apuleius' well-known Isis novel *Metamorphoses*,[4] in which the priest of Isis is named "Mithras" (*met.* 11: 22; see *CIMRM* 466). Roger Beck, elaborating upon an earlier suggestion by Filippo Coarelli (1989), has argued that the Apuleius who authored the *Metamorphoses* may well be the same Apuleius whose house in Ostia is proximate to the Mithraeum of the Seven Spheres (Beck 2000a). If so, the author may well have been involved in the Mithraic mysteries and, consequently, his (fictive?) association of Isis (and of Amor and Psyche, esp. in *met*. iv–vi) with Mithras would be of more interest than just an employment of a suggestive name.

The only clear parallel to the Capuan relief is the fragment of a yellow jasper gem with a portrayal of Mithras as the ubiquitous bullslayer (the tauroctony), while, on its obverse, is a depiction of Amor and Psyche surrounded by the

inscription NEIXAROPLHZ (*CIMRM* 2356). Armand Delatte writes that all examples of this inscription on gems either refer to a deity whose solar character is clear, for example, to Mithras, Isis, or Leontocephales, or to representations of Amor, either alone or in conjunction with Psyche (Delatte 1914: 14). Further, Charles King, in his classic study of *Antique Gems,* notes that yellow jasper was a "favorite material for the extensive series of intagli connected with the worship of Mithras" (King 1860: 338). The clear implication of the gem, however, is that Amor and Mithras are, in the minds of some, equivalent. The exact role of Psyche in this relationship portrayed on the gem remains unclear.[5] Unfortunately neither the provenance nor the present location of this gem is known.

Taken together, the historical evidence—the presence of the Capuan relief in a Mithraeum, the influences from Magna Graecia upon that relief, and the lost gem—suggests that the Amor of the Capuan relief was intended as a representation of Mithras, and/or of his surrogate, the initiating *Pater*, who guides and supports with paternal love the descendant soul of the initiate through his initiatory trials toward a goal of re-ascent. Since, however, the Greek influences upon the relief, while certainly possible, are not demonstrable, and since the provenance of the gem is unknown and its relevance for the significance of the relief is not, therefore, demonstrable, such a synthetic conclusion remains highly speculative. As the anthropologist Fredrik Barth has concluded, "a historical viewpoint [in and of itself] holds no magic key" for solving cultural puzzles without a reasonably sound and detailed account of the empirical processes whereby these materials are produced, transformed, and transmitted (Barth 1987: 9, 22; see Martin 2001).

More tantalizingly, the historical evidence *does* demonstrate that an association of Amor and Psyche with Mithras had, in the early centuries of the Roman Empire, crossed the minds of at least some apart from those of the Capuan Mithraic community. It is, in other words, not just the possibilities of historical influence but also the possibilities of human minds that constitute those *res gestae* and their surviving representations that we term "history." In the absence, therefore, of any conclusive account of the empirical (historical) processes whereby such a representation as the Capuan Amor and Psyche relief was produced, I turn to the cognitive scientists to explore whether their empirical investigations into the workings of human minds might be of

help. The question raised thereby of the relief, then, is not whether historical *possibilities* for explaining its presence and significance in the context of the Capua Mithraeum can be documented; they can. The question is what kind of mind does it take to realize these historical possibilities and do we have any kind of evidence for that kind of mind in this kind of context?

The mind of the Mithraist

Cognitive scientists seek to explain the kinds of mental representations, both perceptual and conceptual, that the innate capacities of and constraints upon the cerebral processing of sensory stimuli and sentient input allow. They attempt, further, to explain the memory, transmission, and transformations of these mental representations, and the relationships among them. Employing some of the conclusions of the cognitive sciences, I should like to argue that the Capuan Amor and Psyche relief represents a conscious and intentional re-representation of a classical mythic theme in a Mithraic context. Further, I will argue that this re-representation was made possible as a consequence of quite ordinary, and predicable, cognitive processes such as that described by the developmental cognitivist, Annette Karmiloff-Smith (1992).

According to Karmiloff-Smith, the re-representational process, which recurs throughout childhood development, is "a specifically human way to gain knowledge." By redescribing its own representations "or, more precisely, by iteratively re-presenting in different representational formats what its internal representations represent," the mind, according to Karmiloff-Smith, exploits "internally the information that it has already stored (both innate and acquired)" (Karmiloff-Smith 1992: 15).[6] Although this developmental process of representational redescription is, for Karmiloff-Smith, primarily endogenous, she notes that "clearly the process may at times be triggered by external influences" (Karmiloff-Smith 1992: 18). I should like to suggest that this childhood developmental process, which Karmiloff-Smith attributes to some kinds of new learning among adults as well (Karmiloff-Smith 1992: 18), is replicated in and exploited by the Mithraic course of initiation. By this explanation, the Mithraic course of initiation allowed for the personal (internalized) knowledge acquired by an initiate through

initiation to become externalized and consciously manipulated. The resultant cognitive flexibility would allow a Mithraic initiate the intentional ability to produce such seemingly extraordinary representations as the Amor and Psyche relief.[7]

I have argued elsewhere (Martin 2005) that Mithraism belongs to a "mode of religiosity" that is termed by the cognitive anthropologist Harvey Whitehouse "imagistic" (2004). Imagistic modalities of religion, as described by Whitehouse, should not be misunderstood as simply designating a category of religious traditions that employ images, which, of course, virtually all do. Rather, in Whitehouse's description this modality is characterized by a diversity of precepts and practices that are based on local knowledge, that are associated with small-scale, face-to-face groups, and that are transmitted through infrequently performed rituals, especially through emotionally salient initiation rites. These traits of social organization and ritual practice seem to accord well with what is known of Mithraism.

The rites of initiation by which knowledge in such groups is produced and transmitted have been described as "rites of terror" (Whitehouse 2000: 21–33). Such initiation rites were characteristic of Mithraism as well (Martin 2004, 2005) and are dramatically portrayed in the painted scenes of initiation along the front surfaces of the right (northern) bench of the Capua Vetere Mithraeum—the "southern" bench, or direction of ascent, in its astrological symbolism. These scenes have been dated in the first half of the third century AD, following an enlargement of the benches somewhat earlier (Vermaseren 1971: 50–51).

In the first two of the Capuan initiatory scenes, a Mithraic initiate is depicted as blindfolded and naked (Vermaseren 1971: Pl. XXI) and as menaced, subsequently, by sword and/or by fire (Vermaseren 1971: Pl. XXII; *CIMRM* 198). Until recently, these scenes were considered the only extant portrayal of these rites (Vermaseren 1971: 24). In 1976, however, a large crater was discovered in a Mithraeum in Mainz, which confirms that some form of initiatory threat was a feature of Mithraic initiation generally (Horn 1994; Beck 2000b). In a scene on this cup, an initiating Father aims an arrow from his drawn bow directly at the head of the initiate, who, like the initiate in the Capuan scenes, is portrayed as smaller, naked, and vulnerable (Beck 2000b: Pl. XIII). The emotional salience of such terrifying rituals would be further heightened by techniques of sensory deprivation, typical of initiatory

experiences generally, such as blindfolding the initiate and/or situating his initiation in a darkened chamber. The Mithraic community at Capua apparently practiced such techniques, as attested by the Capuan initiatory scenes and by the underground site of the Mithraeum.

These initiatory rites of terror produce personal inspirations or individual "revelations" in the form of "patterned screen[s] of representations and feelings against which later insights and revelations … [may] be projected" (Whitehouse 2000: 30).[8] Cognitively, these analogical representations are encoded in the autobiographical memory system and are only activated and organized by the rememberer when presented with stimuli associated with his participation in the initiatory rites, such as relevant persons, images, and/or events.[9] In the case of Mithraism, these stimuli would include, and be reinforced by, an initiate's further participation in subsequent stages of initiation either as observer or as initiator.[10]

The internal representations occasioned by initiatory rites, as described by Whitehouse, would not, according to Karmiloff-Smith's developmental model, initially be available to conscious access and verbal report (Karmiloff-Smith 1992: 22; for Whitehouse's own perspective on the relationship between Karmiloff-Smith's model and his own, see Whitehouse 2004: 89–94 and 115–117). According to Karmiloff-Smith's model, representations of knowledge in this initial phase are "simply added, domain specifically, to the existing stock" of stored (or remembered) knowledge (Karmiloff-Smith 1992: 18). She describes this initial phase as an "internally driven phase" during which external input ceases to be the focus and a "system-internal dynamics take over." Although this "system-internal dynamics" may culminate in a relevant "behavioral mastery"—of ritual procedures, for example—its encoding in autobiographical memory will have minimal effect, if any, on knowledge previously encoded in working memory (Karmiloff-Smith 1992: 18–19). Given, in other words, two "procedures for analyzing and responding to stimuli in the external environment"—ordinary and initiatory knowledge about the world, for example—the "potential representational links and the information embedded in [the] procedures remain implicit" (Karmiloff-Smith 1992: 20).

Additionally, the ritual production of internal representations might be described as an exploitation of innate cognitive systems or templates by its introduction of selected stimuli. One of the cognitive systems that was

exploited by Mithraism is, I suggest, that relating to place and environment. As a consequence of our evolutionary history, human beings—like all species—require, in order to survive, rather detailed information about their complex, natural surroundings. And, like all species, our mental capacities are exquisitely attuned to processing just those environmental stimuli that are required to establish the parameters of actions necessary for that survival (Boyer 2001: 120–121). The intelligence of *Homo sapiens,* consequently, gravitates naturally to spatial organization—a cognitive ability especially characteristic of males (Sherry 2000).

The Mithraic temples themselves, designed according to Porphyry as a "likeness of the cosmos" (Porph. *de antro.* 6), exploited a syntax of place and environment (as described by Gordon 1996), as did the Mithraic tauroctony, a collage of artistic clichés organized as a "star-map" or as a "celestial template" (Beck 1998: 125). This Mithraic representation of cosmic space effectively exploited the innate cognitive sensitivity of its male membership to spatial location by reflecting and situating the initiate in an astrological/astronomical organization of the cosmos that was typical of the Hellenistic cultural environment (Martin 1987). In this first representational format, however, intuitive experiences of location would not, according to Karmiloff-Smith's model, either be generalizable or articulable.

In a second format of re-representation, according to Karmiloff-Smith, initial representations become "reduced" in a way that they lose many of their details; they become simpler and less specialized but more cognitively flexible. The rich, evocative complexity of the tauroctonous star-map, for example, might become conceivable as a safe and controlled space that is now potentially realizable. The cognitive flexibility that is characteristic of conceptual representations at this stage can, according to Karmiloff-Smith, be employed for other goals where explicit knowledge is required (Karmiloff-Smith 1992: 21). Thus, internal representations of spatial organization and order produced by Mithraic initiation could be transferred, for example, to an affirmation of loyalty to the wider ideals of a *pax romana* (Merkelbach 1984: 153–188), though yet without any explicit conscious reflection.

Finally, in a further stage of redescription, "knowledge is recoded into a cross-system code … [that is] close enough to natural language for easy translation into stable, communicable form" (Karmiloff-Smith 1992: 23).

Once the ordinary cognitive process of redescription had taken place and explicit representations become "manipulable," Karmiloff-Smith concludes, violations could be introduced into data-driven, veridical descriptions of the world (Karmiloff-Smith 1992: 22). Such violations would include those counterfactual and counterintuitive representations and formulations that are characteristic of every religion (Boyer 2001)—and, I might add, of their inventive or, if I may, their "syncretistic" representations—such as that exemplified by the Capuan Amor and Psyche relief.

The cognitive possibilities for representing the Capuan Amor and Psyche theme in a Mithraic context could, I suggest, only have been a conscious and intentional consequence of a cognitively mature, flexible, and innovative mind, such as would have been inculcated by the Mithraic course of initiation. The mind of the anonymous Mithraist responsible for this relief would seem to be, therefore, that of one of the highest of the grades of Mithraic initiation, perhaps that of the (in this case anonymous) *Pater* himself. Although the possibility for representing Amor and Psyche with Mithras was, as we have seen, both a historical and a cognitive possibility elsewhere than at Capua, the full significance of the Capuan relief would, in the absence of any centralized organizational structure for Mithraism, belong to (and largely remain) the local knowledge of those who had shared in the initiatory regimen practiced by the Capuan Mithraic community.[11]

Conclusion

Mithraism was a new Roman religion in an expanding world of Roman cultural influence. The Mithraic community at Capua represented one of the earliest and southernmost incursions of "Romanness" into Magna Graecia. At the same time that Mithraism represented the growing and expanding dominance of Roman culture, its ritual regimen offered its potential recruits, the generally uneducated lower ranks of the military and the petty civil servants who dominated its membership, an incremental possibility for expanded cognitive flexibility and creativity that was elsewhere available only through alternative, class-differentiated techniques such as formal education.[12] The competitive advantage of such a supple and innovative mind

is clear, especially among members of the military who must deal quickly and decisively with the rapidly changing conditions of battlefield strategy, and even among the local Roman bureaucrats who had to administer an often discontent population. The difference is one of doing things creatively and with greater self-reliance rather than merely acting in conventional and expected ways (Tomasello 1999: 53).[13]

By this interpretation, Mithraic initiation did not transmit any coherent corpus of Mithraic or "mystery" knowledge (apart, of course, from the local knowledge developed by each Mithraic cell). Rather, the Mithraic course of initiation, whatever its local variants, accomplished an increase in and potentially a perfection of a particular cognitive skill, of the innate capacity of human cognition to achieve "representational flexibility and control" (Karmiloff-Smith 1992: 16). It is perhaps the cognitive and the material products of this expanded cognitive flexibility, control, and creativity that have been dismissed by some observers as examples of syncretistic nonsense but perceived by others as the "wisdom" of the mysteries.

9

The (Surprising Absence of a) Mithras Cult in Roman Egypt[1]

The Roman Cult of Mithras was the most widespread and densely distributed cult of the Roman Empire. However, in 1986, the late archaeologist and historian of religion Gary Lease surveyed both the material and the textual evidence documenting this cult in Egypt and concluded that while there *is* evidence for a Mithraic presence in Egypt, this same evidence suggests that this presence was negligible. Given the dispersion of the cult throughout the empire, its negligible presence in Roman Egypt is somewhat surprising. Consequently, I should like to review the evidence for the existence of Mithraism in Roman Egypt, to suggest a previously unnoted military deployment as the source for that presence, and to explore the political and religious factors for why alternative religious positions dominated.

Mithras in Egypt

Although a Persian cult of Mithras is documented from the Fayyum in the third century BC (*CIMRM* 84),[2] the most conclusive evidence for the presence of the Roman cult of Mithras in Egypt is three marble reliefs of the tauroctony, the ubiquitous and identifying cult scene of Mithras slaying a bull. These reliefs are now displayed in the Graeco-Roman Room of the Egyptian Museum, Cairo, and are, presumably, from Memphis.[3] However, the *provenance* of these reliefs was never recorded and has never been firmly established (Lease 1986: 115–118), nor has the mithraeum itself ever been discovered, its presumed location now beneath cultivated fields (Jeffreys 1985: 44). Lease concludes that the lack of information "concerning the location and context of … these few remains from that Mithraeum can tell

us very little about Mithraism's presence and history in Egypt" (Lease 1986: 117–118; but *v.i.*: 5–6).

Also of interest are two representations of the so-called leontocephalous, or lion-headed figure enwrapped in the coils of a serpent, one of which was formerly displayed in the Museum of Graeco-Roman Antiquities in Alexandria, currently closed (*CIMRM* 103, Fig. 36), while the other is in the collection of the Egyptian Museum in Cairo (*CIMRM* 102; Strzygowski 1973: 14–15, #7268). The *provenance* of these statues is also unknown, though the latter is catalogued with the finds from Mît Raheîna, near Memphis (Strzygowski 1973: 14–15, #7268). Although the leontocephaline representation is familiar from a number of Western Mithraic sites (e.g., *CIMRM* 312, 326, 382, 543, 544, 545, 551, 776, 777, 1123), there is little agreement about the identity or origin of this figure, though it is often associated with a representation of Time (Vermaseren 1975: 446–456; Jackson 1985: 149–170). Following the suggestion of the Italian historian of religions Raffaele Pettazzoni (Pettazzoni 1954a: 171–179 and 1954b: 180–192), Lease concludes that the figure seems to be a syncretistic product of images of the Alexandrian feasts for Aion and Kronos together with Persian concepts and has little to nothing to do with Roman Mithraic cult practices (Lease 1986: 118–119).[4]

The textual evidence for Mithraism in Roman Egypt is even less informative than are the material remains. A so-called "Mithras Liturgy," part of the *Great Paris Magical Codex*, an early fourth-century papyrus book from Egypt, was published by the German classical philologist Albrecht Dieterich in 1903. This late text is, however, no longer considered to be Mithraic (Betz 2003: 5).[5] More tantalizing is a papyrus fragment, probably discovered around Hermopolis in 1906 but only published in 1992 by the German-American papyrologist William Brashear under the title *A Mithraic Catechism from Egypt* (1992). While this papyrus fragment confirms the existence of some knowledge about Mithraism in Egypt, its own fourth-century date situates it as a text parallel to the "Mithras Liturgy," both of which make references to Mithraism removed from any actual cult practices (Brashear 1992: 16; Griffiths 1994; Beck 1995). Both of these texts are more profitably compared to literary liturgies of the more contemporaneous *Corpus Hermeticum* than they are to any Mithraic rites (Betz 2003: 35–38).

Based on the "paucity" of Mithraic evidence from Egypt, Lease concludes that the presence of Mithraism there "was an extremely limited one" (Lease 1986: 120, 129). Given the quantity of Mithraic evidence elsewhere in northern Africa—not to mention the rest of the empire—the archaeologist and historian of the Roman military C. M. Daniels goes a step further to speak of a "near vacuum" of evidence for Mithraism in this province (Daniels 1975: 269 and n. 29).[6]

Mithraism and the military in Egypt

It is generally accepted that the transmission of Mithraic cults was largely advanced through the reassignments and redeployments of the Roman military (Daniels 1975). Initiates into these dispersed cult groups were drawn largely from the ranks of the military, for which Mithraism had special appeal (Martin 2014), and where the legions were stationed, we have come to expect an establishment of Mithraic cults. Consequently, apart from Italy where the cult seems to have been centered, mithraea or Mithraic temples are documented most frequently from military garrisons protecting the *limes* of the empire—along Hadrian's wall in Britain, along the Rhine and Danube rivers and, of course, in northern Africa.[7] Roman legions had, of course, been stationed in the Roman province of *Aegyptus* since its annexation into the Roman Empire by Octavian (Augustus) in 31 BC. These legions were stationed primarily in proximity to Alexandria, the cosmopolitan crossroads of the Mediterranean Basin.[8]

From the mid- to late-second century—the century of the founding and rise of the Roman cult of Mithras—the Legio II Traiana Fortis was the primary Roman authority in Egypt. In 125, this legion was stationed in Nicopolis, a few miles northeast of Alexandria, where it shared a camp with Legio XXII Deiotariana. The XXII Deiotariana, together with a detachment from Legio II Traiana Fortis, was dispatched to Judea in 132 to help crush the second Jewish revolt of 132–136, during or after which the XXII Deiotariana was either destroyed or disbanded. A number of units of the Legio II Traiana Fortis had remained in Egypt to monitor the large Jewish population in Alexandria. In 296, Diocletian reinforced that garrison with a second legion, the Legio

III Diocletiana. Elements of the reinforced legion were stationed in various places throughout Egypt (Panopolis, Thebes, Syene, and Pselchis) as the basis of Roman authority in the province until the mid-fifth century (*Notita Dignitatus*; *OCD*[3] *s.v.*).

Lease concludes that the frequent and widespread redeployment of the Roman military in Egypt mitigated against the establishment of any enduring Roman (or Mithraic) presence in the Egyptian garrisons (Lease 1986: 128). Further, the Roman army in Egypt was not a field army but was engaged primarily in garrison duty. The vast number of its recruits was Egyptian. Like their Egyptian comrades, these soldiers tended to worship local deities rather than importing them from elsewhere (Milne 1924: 174–175, cited by Lease 1986: 128). Finally, no specific connection with Mithraism is documented either for the II, XXII, or III legions. However, the deployment of a unit of the Legio V Macedonica in Egypt is, to my knowledge, a previously unremarked exception.

The Legio V Macedonica was deployed to Judea in 66 under Titus Flavius Vespasianus. After Vespasian was declared emperor in 69, the V Macedonica escorted him to Alexandria and then returned to its home base at Oescus (in modern Bulgaria). A second eastern expedition took place when a subunit of the V Macedonica was sent back to Judaea, to help suppress the second Jewish revolt (132–136). Under Diocletian (284–305), a *vexillatio*, or cavalry detachment of about 400–500 men, from the V Macedonica was subsequently reassigned to reinforce the Legio III Diocletiana and became part of this mobile army that was the core of the Roman military presence in Egypt until late antiquity. In 293/294, this reassigned unit from V Macedonica was stationed in Memphis; a building complex that was possibly a Roman barracks has now been discovered there (Jeffreys 1985: 17). After several redeployments throughout the east, the soldiers of this cavalry unit finally returned to Memphis, where they were to stay until the early fifth century (Zuckermann 1988: 280, 281, 286; Lendering 2011).

Mithraic dedications are attested at each of the sites where Legio V Macedonica (whose symbol was the bull!) was stationed from 167 until the second half of the third century, for example, in Dacia at Potaissa (*CIMRM* 1921, 1929), and in Pannonia at Poetovia (*CIMRM* 1590, 1592, 1594, 1596) (Daniels 1975: 251). In fact, one of the earliest documentations for Mithraism

generally is an altar from Scythia Minor at Troesmis dedicated to Mithras by L. Valerius Fuscus of the V Macedonica, the earliest documentation for the presence of Mithraism in the West after that in Carnuntum, that is, sometime after 71 (*CIMRM* 2286; Daniels 1975: 251).[9]

It would seem that the worship of Mithras had a long and even somewhat official history within the Legio V Macedonica from the very advent of his Western cult (Clauss 2000: 34). This long history of Mithraic association by members of the V Macedonica and the reassignment to the III Diocletiana of a cohort from this legion that was stationed in Memphis offers a plausible explanation for the establishment and presence of a mithraeum in that city.

But what about the cosmopolitan city of Alexandria itself? Surely this Egyptian center of international commerce and cult activity would have proven hospitable to a Roman deity—especially one associated with the sun.

Mithraism in Alexandria

The existence of a Mithraic cult in Alexandria is based on an account by George of Cappadocia, patriarch of Alexandria from 356 to 361, concerning construction of a church on the ruins of an abandoned Mithraeum (Rufinus *hist. eccl.* 11.22; Sozomenos *hist. eccl.* 5.7; Socrates *hist. eccl.* 3.2–3) (Lease 1986: 124 and n. 41).[10] And, there is an account of the discovery in 391 of the ruins of a mithraeum in Alexandria by the patriarch Theophilus, who, acting on the basis of Emperor Theodosius' anti-pagan decrees, continued on to destroy the Serapaeum (Socrates *hist. eccl.* 4.16)—though this account seems to borrow from the accounts attributed to George of Cappadocia some thirty years earlier (Lease 1986: 125, n. 43; Schwartz 1966: 109).[11]

However, beyond suggesting that there was a Mithraic presence in Alexandria, such apologetic accounts as those attributed to George and Theophilus are, otherwise, notably unreliable, especially since there is no material evidence to confirm either of them. And, apart from the brief presence of the Legio V Macedonica in Alexandria at the time of Vespasian's visit in 69, there is no record for any military associations with Mithras there—though perhaps it would not be too venturesome to infer that the establishment of the mithraeum in Alexandria was influenced by elements of that legion's later

presence in Memphis. In any case, it was the worship of Sarapis (Lt: Serapis) and Isis that dominated the religious practices of Roman Egypt from their cult center at the Serapeion in Alexandria.

Mithras and Sarapis

According to Tacitus, the home of Sarapis was Memphis (Tac. *hist.* 4.84),[12] the only recorded site of a mithraeum outside of Alexandria. Whatever the origins of the Hellenistic Sarapis, by the Roman era it was the major cult of Egypt. In many ways, Sarapis was a consolidation of the traditional Egyptian sun god Ra with other associated solar deities. The solar character of Sarapis is exemplified by, for example, the colossal marble statue of Helios from the second half of the second century, discovered in Lycopolis on the west bank of the Nile some 438 km south of Alexandria and now exhibited in the restored and recently reopened Neues Museum, Berlin. According to the inscription on this statue, it was commissioned under Antoninus Pius (136–161) for a Sarapis sanctuary.[13]

In addition to his solar character, Sarapis also was known as *invictus* (*SIRIS* 374, 393, 407, 583, 669, 685, 700, 792, 797; cited by Pachis 2010: 177, n. 58). Thus, to the attestation of Sarapis as *invictus deus* (*RICIS* 501/0147; 603/1102; 616/0205; and 616/0207, cited by Pachis, 2010: 177, n. 58), it would not have been unproblematic to have ascribed to Sarapis the cult title *Deus Sol Invictus*, which was, of course, the official cult title of Mithras (Beck 2006: 5). It is understandable, therefore, that the Egyptian Sarapis, as an invincible solar deity, would have eclipsed the influence of the Roman Mithras in the former's own country. For while Mithras and Sarapis occasionally shared a temple in common as *synnaioi theoi* (e.g., at Dura-Europos [*CIMRM* 40], at Rome [*CIMRM* 356, 479], or in Noricum [*CIMRM* 1439]), they were never identified (Fleck 2006: 307, n. 104)—or only very rarely so (*CIMRM* 2353). Perhaps the Egyptians, like the Greeks before them, simply viewed Mithras as "a foreign god worshipped by the kings of Persia" (Cumont 1956: 33)—as indeed he had been in the Fayyum some 300 years earlier.

Finally (and ironically), the Egyptian cult of Sarapis came to be considered a Roman "religion of loyalty," as was the case with the Mithras cult (Merkelbach 1984: 154–188). According to the third-century account by the

Greek biographer Diogenes Laertius, Alexander responded to the Athenians who had just voted him to be Dionysus that "[y]ou might make me Sarapis as well" (Diog. Laert. 6.63). Although this late story is doubtlessly apocryphal, it does indicate a perceived relationship between the founder of Alexandria, an archetypal representation of imperial power, and the god whose primary seat was the Alexandrian Serapeion. Similarly, in 96 AD, Vespasian turned the Judean campaign over to his son Titus and returned to Rome by way of Alexandria where he was officially proclaimed Emperor by Tiberius Iulius Alexander, Prefect of Egypt on July 1 (two days before Vespasian's own army did so in Caesarea) (Bowman et al. 1996: 275). While in Alexandria, Vespasian visited the Serapeion where he received an oracle from Sarapis which confirmed that his reign was divinely sanctioned and, further, he was reputedly granted the power to heal by the god (Tac. *hist.* 4.81.1–3; 4.82; Suet. *Vesp.* 7.1–2; Dio. Cass. 66.8.1). The precedent for Vespasian's visit to Alexandria was Alexander's reported visit to the oasis of Siwah to receive his own legitimating oracle 400 years earlier (Henrichs 1968: 55–61). The effect of these stories was to represent Vespasian as both a new Alexander and a new Emperor whose rule was sanctioned by Sarapis (Henrichs 1968: 75). Subsequently, Sarapis, along with Isis, came to be considered the agents *par excellence* of imperial authority (Pachis 2010: 163, 216), and, under the rule of Septimius Severus, the Roman Emperor became identified with Sarapis as well, while his son, M. Aurelius Antoninus (Caracalla), received the title *philosarapis* (Heyob 1975: 32 and n. 185; Turcan 1996: 93). The historian of religion Panayotis Pachis has concluded that such pairings of imperial and divine authority "find their ideal form of expression" in the worship of Sarapis and Isis, as it had also in that of Mithras (Pachis 2010: 217).[14] However, in face of the Mithraic presence in Egypt, which was in any case minimal, Sarapis was the clear deity of choice for Egyptians. As Lease so eloquently concludes, "[t]he inherent strength of Egypt's local cults and worship proved to be too dense for Mithraism to penetrate … " (Lease 1986: 129).

Mithras and Isis

The goddess Isis, a colossal marble statue of whom was also discovered in Lycopolis in her representation as Isis-Fortuna, is displayed alongside that of Helios in the Neues Museum, Berlin (*SMB* 2009). Isis is, of course, the consort

of Sarapis and, like Sarapis, is invoked as *invicta* (Pachis 2010: 211 and n. 120). Together with Sarapis, Isis represented the order of the world, including the political order. It would again seem that this lunar consort of the solar Sarapis, would have resonated with the lunar and solar representations common to virtually all Mithraic tauroctonies—and Isis, like Sarapis, did sometimes cohabit with Mithras (e.g., in Rome) (*CIMRM* 356, 634). It would seem possible, however, that once again the indigenous Egyptian representations of these celestial references overshadowed those of Mithraic possibility for Egypt.

In addition to being a center of cult activity, Alexandria was above all an active economic and commercial city from which an active trade with Rome was based. Arguably more important than the legions stationed in and around Alexandria was the Roman navy (which, however, operated under the auspices of the army). During the second century and first half of the third, the *Classis Augusta* fleet was based in Alexandria. Its duties were to protect the harbor of Alexandria, to transport military detachments, to patrol and police traffic on the Nile, to protect the trade lanes between Alexandria and Rome, and to patrol the eastern Mediterranean generally (Adkins and Adkins 1994: 70–71). Like the legions, members of the navy were recruited locally and like the local recruits in the army, they worshiped traditional Egyptian deities.

Preeminent among the deities attended to by merchant marines as by indigenous sailors was, of course, the goddess Isis (Turcan 1996: 79–80; Pachis 2010: 287–294). Whereas the Roman cult of Mithras had been distributed throughout the empire largely through the deployments and redeployments of the army, the Egyptian cult of Isis was distributed throughout the empire over the sea routes of commercial and naval sailors (Heyob 1975: 12; Pachis 2010: 150). This maritime aspect of Isis, while rooted in Egyptian tradition, was nevertheless especially a development of the Graeco-Roman era and was centered in Alexandria, the major port of Egypt (Savvopoulos 2010a: 418). While the Serapeion remained the Egyptian center for what historian of religion J. Z. Smith identifies as the centripetal tendency of traditions, it was Isis who was identified with the centrifugal ideals of the ecumenical world (Smith 1978: 131; Pachis 2010: 317–318). Not only did the Isis-Sarapis cult provide a strong and popular indigenous identity for Egypt, it was strong enough to be exported throughout the empire with a density and distribution that rivaled that of Mithras.[15]

Conclusion

From research in the cognitive sciences, we know that human brains readily produce representations of superhuman agents (Boyer 2001: 93–135). The recognition of similarities among such commonly produced pan-human representations is what allows for *theocrasia*, as, for example, when the Greeks identified Egyptian deities with their own (e.g., Hdt. 2. 156). A recognition of such pan-human representations explains processes of so-called "syncretism" generally.[16] However, the perseverance of contingent elaborations of these pan-human representations in the face of cosmopolitan and international pressures indicates a commitment to and retention of a traditional cultural identity by Egyptians—even though their religion and culture had been Hellenized.

The archaeologist Kryiakos Savvopoulos argues for an "Alexandrianisation" of religious and cultural life in Egypt. Savvopoulos defines "Alexandrianisation" as "the adaptation and systematic promotion by the Ptolemies of traditional Egyptian values in a Greek visual vocabulary, while also preserving their Egyptian identity" (Savvopoulos 2010b: 422; also Turcan 1996: 76). During the Roman period, Alexandria came to "represent not only the recent and in a sense glorious Ptolemaic past but also the long and indigenous history [of Egypt]" (Savvopoulos 2010b: 421). While Alexandrianisation since the Ptolemies focused on Isis and Sarapis, the political significance of Alexandrianisation, and of Isis and Sarapis, reached a high point during the mid- and late-second century (Savvopoulos 2010b: 417), precisely the time that Mithras began to achieve significance for religio-political life in the Western empire. Whereas the development and spread of Mithraism paralleled that of Christianity in the Western empire from the early second century until the latter achieved its historical (and political) dominance in the fourth century, it was the Egyptian worship of Isis-Sarapis that predominated in Egypt until it, too, was overcome by Christianity. With the forced eclipse of both of these widespread traditions by Christianity under the anti-pagan decrees of Theodosius in the last decade of the fourth century, elements of both were rejected by, assimilated into, and/or transformed by the newly dominant Christian traditions, where many still persevere (Witt 1971: 269–281; for Mithraism, Lease 1980)—but that's a topic for another time and place.

Notes

Chapter 1

1 Richard L. Gordon reports that 49 percent of votive inscriptions dedicated to Mithras between 150 and 300 AD are from the Rhine-Danube area, while 31 percent are from Italy, 18 percent from Rome (Gordon 1972: 103).

2 Justin, who was born in Samaria (*i apol.* 1), came into contact with Christianity in Ephesus (*ii apol.*). He then came to Rome where he headed a Christian school and presumably first encountered Mithraism (*OCD*[2]: 570).

3 "Si le christianisme eût été arrêté dans sa croissance par quelque maladie mortelle, le monde eût été mithriaste" (Renan 1882: 579).

4 Although Boyle calculates that the mithraeum of S. Clemente would hold only thirty to forty persons, many of the Roman mithraea are considerably larger, for example, those of the Circus Maximus, S. Prisca, or S. Stefano Rotondo, suggesting a larger average figure for accommodations in Roman mithraea generally.

5 There is no evidence to suggest that a Mithraic "congregation" is limited in size to the number of initiates which a given sanctuary could accommodate at one "sitting." The public locations of many of the larger Roman mithraea, in the Baths of Caracalla, for example, suggests some may not have served a fixed residential population at all.

6 Mithraism appeared in the West at the end of the first century, along with Christianity. Both experienced rapid growth in Rome during the third century. On the fascination of "eastern wisdom" for the educated classes of Rome, see Nock (1937: 111) and (Gordon 1972: 110). J. B. Ward-Perkins notes that available space had already become a problem in Rome by late Republican times (Ward-Perkins 1981: 185).

7 William J. MacDonald notes that earlier buildings were often filled in or their structures utilized to establish a substantial foundation for new construction. Vitruvius (6.8.1–7) emphasized the importance to Roman architects of strong foundations. Stone members of demolished buildings, including sculpture, were sometimes broken up and used for aggregate, a necessary component of the concrete used for foundation slabs and for weight-bearing structures in Roman construction (MacDonald 1965: 149, 155).

8 Hans Leisegang has argued that the astrological rationale assumed by Macrobius differs from that of Greek scientific astrology by attributing a hypercosmic locus for the controlling social power (Leisegang 1955: 201–203).

9 Gordon counts sixteen fourth-century senators known to have been Mithraists, most holding the rank of Father (Gordon 1972: 111).

10 See, for example, the star-map in the illustrated manuscript of Cicero's translation of Aratus' *Phaenomena* (MS Harley 647, British Museum, in Koehler and Mütherich 1971: Tafel IA, 74), which most scholars argue is an eighth- or ninth-century copy from ancient originals (Thiele 1898: 152–154) but which art historian W. Y. Ottley dates to the second or third century (Ottley 1836). On the tauroctony as astrological image, see, in addition, Beck (1984) and Ulansey (1987 and 1989).

11 See M. Rostovzeff's discussion of problems reorganizing and disciplining the army and the bureaucratic administration of the empire at the end of the third and the beginning of the fourth centuries (Rostovtzeff 1957: 510–514).

12 The details of Constantine's economic policy are unknown (Burckhardt 1949: 340). However, he inherited a system that never had established a fixed budget or stable reserves. In case of emergency, "the usual way of getting the money … was by means of extraordinary taxation or by means of requisites and confiscations" (Rostovtzeff 1957: 515–516). It is well known that Constantine financed and embellished his new Eastern capitol at Constantinople at the expense of pagan temples and their treasuries.

13 One of the most important problems faced by Constantine, as for Diocletian before him, was the stabilization and organization of the power of the emperor (Rostovtzeff 1957: 506–510).

Chapter 2

1 The well-known *Homeric Hymn to Demeter*, for example, presented the "official" story of the Eleusinian mysteries (Mylonas 1961: 3; Richardson 1974: 12–13) and Plutarch could present, in his *de Iside et Osiride*, a Hellenistic synopsis of the Isis myth.

2 The tauroctonous image appears, for example, on amulets (Beck 1984: 2002–2015).

3 As Robert Turcan concludes: "à la différence d'autres cultes païens du monde antique, celui de Mithra, avec son système constant e coherent d'images, avec sa

liturgie et son architecture religieuse appropriée, nous apparaît, dans le monde romain, comme un culte fortement characterize et singularize par sa *doctrine* du sacrifice, base de toute une théologie" (Turcan 1981: 341–380; and see "Discussion," 375–376).

4 On the inadequacy of imposing familiar "discursive formations" on the cultures of others, see Foucault (1972: 22) and Dumont (1980: 1–20; 1970: 31–41). On the "embedded" nature of "religion" in Mediterranean antiquity, see Malina (1981, Ch. 2; 1986: 92–101).

5 R. L. Gordon has already explored the formal, authoritarian, and ritualist structures shared by the "typical" Mithraist and the military (1972: 92–121).

6 See Heraclitus: "War is both king of all and father of all" (*fr.* 53); "One should know that war is universal and jurisdiction is strife, and everything comes about by way of strife and necessity" (*fr.* 80; trans. Freeman 1983: 28, 30).

7 Plutarch defines "syncretism," the sole usage of this word in antiquity, as the systematic consequence of such displaced violence (*de frat. am.* 19).

8 Benjamin Isaac (1990) argues that the Roman army was intended primarily for conquest and domination rather than for the defense of its frontiers against foreign invasion.

9 In the summary of Herbert Schutz:

> Behind the loosely defined northern line of demarcation, the legions could devote themselves to the non-military aspect of their presence in the land, the conversions of conquered territories into productive provinces … In their wake the military forces brought an organized society, stratified along Roman lines into which the local social structures eventually were incorporated. In due course this gradual integration behind secure borders gave rise to a provincial culture determined largely by the army stationed in depth in the frontier provinces, one which in its regional differentiations extended along the Rhine and Danube from the English Channel to Noricum and *Pannonia*. (Schutz 1985: 20)

10 G. W. Bowersock has emphasized the use of the Greek language and culture by indigenous religions in the Graeco-Roman world as an effective strategy for international communication and universalism (Bowersock 1990, esp. Ch. 1). The strategy of Hellenism contrasts sharply with the preponderant use of Latin, the official language of imperial Rome, in Mithraic epigraphy.

11 As Vernant observes, "what the ox is to wild animals, wheat is to wild plants" (Vernant 1989: 38).

12 The tendency to over-identify Mithraic imagery characterizes the interpretation of Merkelbach (Martin 1987: 155–157).

13 I have previously argued that Hellenistic syncretism generally is not to be understood as an arbitrary confluence of cultural elements but as a structured system of relationships organized by the play of sympathy and antipathy (Martin 1983).

14 Compare Victor Turner's treatment of the "positional" meaning of symbols with a symbolic-cultural system (1967: 51) and Lawson's and McCauley's cognitive theory of symbolic-cultural systems as "reflexive holisms" (Lawson and McCauley 1990: Ch. 6).

15 On Mithras as harvester, see Bivar 1975: 281, with reference to the Dieburg relief, *CIMRM* 1247.

16 William Swatos has suggested "a sociological definition of cult as 'collectivities centering around either a real or legendary figure whose followers believe that their lives are made better through their participation in activities which honor or are prescribed by the leader' " (Swatos 1981: 20).

Chapter 3

1 This paper is an abbreviated and revised version of my longer paper (Martin 2005).

Chapter 4

1 Süssmilch was influenced by his reading of William Derham's *Physico-Theology: or, a Demonstration of Being and Attributes of God, from Works of Creation* (1713) (Süssmilch 1741: 13). The first edition of Vico's *Principi di una Scienza Nuova* was published in 1725 (Napoli: F. Mosca).

2 I have suggested that, apart from local possibilities, no "canonical" texts, myths, or sets of doctrine were ever produced by Mithraists. Rather, Mithraism belongs to what Harvey Whitehouse has termed an "imagistic" mode of religiosity (Whitehouse 2000; see Martin 2005). "When non-linguistic public representations play … a central role in the transmission of culture knowledge," however, Lawson and McCauley question "the faithful replication of that knowledge" (McCauley and Lawson 2002: 38). Beck has proposed that "extensive

norms reinforcing … [a Mithraic] religious identity over time and space" were transmitted through Mithraic iconography (Beck 2000: 172, n. 123). The anthropologist Fredrik Barth has suggested that such non-linguistic knowledge is transmitted as "broad themes" which cannot be reduced to "unambiguous propositional form" (McCauley and Lawson 2002: 67, citing Barth 1975: 211, 1987: 66–67).

3 The *Heliodromus* ("Sun-Runner") was the sixth and highest grade of Mithraic initiation just below that of Father. Helios was identified in Mithraic imagery and epithet with Mithras as "Mithras Sol Invictus."

4 A reciprocal relationship between Mithras' slaying of the bull and the celebration of a shared meal while sitting on the hide of the bull is suggested by the reversible reliefs.

5 The variability in possible interpretations of the Mithraic meal by local Mithraic groups suggests that its fraternal character might have provided occasions for the recruitment of new members, as is the case with some modern "secret societies" which invite potential members to attend their "private rituals" along with initiate members (Bryan 2001; Martin 2005).

6 "To Mithras as his proper seat, they assigned the equinoxes … As creator and master of genesis, Mithras is set at the equator with the northern signs to his right and the southern signs to his left. They set Cautes to the south because of its heat and Cautopates to the north because of the coldness of its wind" (Porph. *de antro*. 24). Cautes and Cautopates are two torchbearers widely represented in Mithraic imagery, the former portrayed with a raised torch, the latter portrayed with a lowered torch.

7 "Similarly, the Persians call the place a cave where they introduce an initiate to the mysteries, revealing to him the path by which souls descend and go back again. For Eubulus tells us that Zoroaster was the first to dedicate a natural cave in honor of Mithras, the creator and father of all. This cave bore the image of the cosmos which Mithras had created, and the things which the cave contained, by their proportionate arrangement, provided him with symbols of the elements and climates and the climates of the cosmos" (Porph. *de antro*. 6).

8 When portrayed or described, "Miles" or "Soldier" was the third grade of Mithraic initiation.

9 A "metaphorical journey" within the confines of ritual space is similarly characteristic of modern secret societies (Buckley 2000: 166).

10 Despite the probability of local and regional variations in Mithraic ritual form and content, it is nevertheless proper to speak of a "Mithraic ritual system"

because of their historical connections and borrowings (Barth 1987: 8, cited by McCauley and Lawson 2002: 72) and because of the "norms" transmitted in their performance and in Mithraic imagery.

11 The distinction between "imagistic" and "doctrinal models of religiosity" was first proposed by Harvey Whitehouse, on the basis of his work in Papua New Guinea, as contrasting sets of politico-religious dynamics "characterized by" particular patterns of codification, transmission, cognitive processing, and political association (Whitehouse 2000: 1; see 1995). Lawson and McCauley spend much of *Bringing Ritual to Mind* (2002) discussing how their own analysis of Whitehouse's ethnography "reveals larger patterns in the evolution of religious ritual systems (and of religious systems generally)" than does Whitehouse's explanation (McCauley and Lawson 2002: 7, chs. 3, 4, 5). Although there are significant differences between the theory of Whitehouse and that of Lawson and McCauley, the predictions of the two theories largely coincide with respect to non-repeatable special agent rituals and to repeatable special patient rituals (McCauley and Lawson 2002: 146–148), just those rituals that seem to be documented by Mithraic practice.

12 The connection of the central CPS-agent in Christianity (Christ) to baptism (initiation) and to its shared meal is made explicit in a uniformly controlled, coherent set of doctrine. According to the Roman Catholic "doctrine of the real presence," for example, when the body and blood of Jesus are consumed, these surrogate elements for the CPS-agent both serve as the patients of this ritual and "constitute the initial appearance of a CPS-agent" in its structural description (McCauley and Lawson 2002: 118). Because of this postulated immediacy of the CPS-agent, the eucharist, a repeated, special patient ritual came to be considered more important than baptism in the Catholic ritual system and central to it (McCauley and Lawson 2002: 34). This balance of repeated high participation in a comparatively high sensory–laden ritual, stabilized by the conceptual control of doctrinal formulations and transmitted through them, ensured an intuitive (cognitive) bias toward Christianity over the comparatively less-well-balanced ritual system of Mithraism (McCauley and Lawson 2002: 181–182). This cognitive appeal of Christianity, we might conclude, was one of the factors, along with its readily transmitted doctrinal modality, which influenced the rapid and widespread acceptance of early Christianity and which contributed, consequently, to one Roman emperors' acceptance of Christianity as a licit religion of Rome in the early fourth century and another's interdictions of all non-Christian religions by the end of the same century. Because of the doctrinal character of Christianity, historians have attempted, with limited

success, to explain the early appeal of Christianity solely on the basis of its teachings, the general import of which are largely shared, as we might expect, with other contemporaneous philosophies and religions (see, e.g., Beck 2000: 174, n. 132).

13 Some seventy-five years ago, Raffaele Pettazzoni noted morphological parallels between the initiation rites of the Greek mystery cults and those of some Australian tribes (Pettazzoni 1924: 21–44; I am indebted to Professor Giovanni Casadio for this reference), and forty years ago, Maarten Vermaseren, one of the great scholars of Mithraism, suggested that certain features of Mithraism might be found among what he then termed "the primitive peoples of Australia, Africa and America today" (Vermaseren 1963: 129).

Chapter 5

1 Papadimitriou's advice, essentially one of parsimony commonly associated with "Occam's razor," would seem especially apt in constructing plausible scientific hypotheses about components of such a complex "reality" as "history." As neuroscientist Benjamin Libet has observed, "[i]t is common in scientific research to be limited technically to studying a process in a simple system; and then to find that the fundamental behavior discovered with the simple system does indeed represent a phenomenon that appears in other related and more complicated systems" (Libet 2004: 148). Of course, we know from chaos theory that random events, of which historical complexity is replete, may shift the behavior of the entire system (Libet 2004: 152).

2 In the following, I intend to avoid the "mind-blind" *overly*-simplified modeling criticized, for example, by George Lakoff (2008: 212), whereby evolutionary and cognitive proclivities of the species are ignored. Elsewhere, I have considered the cultural transmission of ubiquitous elements of Mithraic material culture, especially the tauroctonous representation—the image of Mithras slaying a bull—that was shared by all Mithraic groups despite the absence of any administrative control (Martin, 2014a).

3 The cognitive psychologist Jesse Bering has observed, "[in] every human society ever studied by anthropologists, uncontrollable tragedies have been seen as caused intentionally by a mindful, supernatural agent" (Bering 2011: 144). Bering cites the research of Harvard psychologists Kurt Gray and Daniel Wegner who observe that "[w]ithout another [actual] person to blame, people need to

find another intentional agent to imbue … event[s] with meaning and allow some sense of control" (Gray and Wegner 2010: 10; Bering 2011: 138).

4 Of course, the withdrawal of Isis' presence from the material world increased, in principle, her cosmic omnipotence, including her power over demons (Pachis 2010: 185–193).

5 See Dodds (1965: 37–68). A fulsome array of demonic as well as divine powers is invoked in the *Greek Magical Papyri*, see for example, especially *PMag*. IV: 1345–1376 (Betz 1986: 64), not to mention the "legions" of demons encountered by Jesus according especially to the Gospel of Mark (Mk. 5: 8–9, 15; Mk. 1: 32, 39; 3: 14–15; 6: 13; also Lk. 8: 30). For a comprehensive study of demons during the Hellenistic period, see Smith (1978b).

6 For a summary of research on the psychological and neural bases of spatial disorientation, see Dudchenko (2010), esp. pp. 69, 91–92, 140, 153–219, 240–249, 252–255.

7 The modern Greek translation of the title of Dodds' book is *Ethnikoi kai Christianoi se mia Epochē Agōnias* (1995), where the English "anxiety" is translated by *agōnias*, the root of the English word "agonize" with the sense of "distress" or "struggle with" (*L-S*, *s.v.*; see also *agchō* = "squeeze the throat," *L-S*, *s.v.*). There is no word in *koinē* (Hellenistic) Greek having the modern sense of "anxiety." Rather they spoke of being "anxious of mind" in the sense of "caring about," "reflection," or "paying attention to" (e.g., *merimna*, *meletē*). A paraphrastic retranslation of Dodds' title from the sense of ancient Greek might, therefore, carry the sense of something like "the shared mental concerns of pagans and Christians."

8 Recent studies have characterized different times of American culture as "narcissistic" (Lasch 1979) and as one of "fear" (Füredi 2006; Glassner 2010).

9 Still, Heidegger's ontology finally led him to ahistorical conclusions about human being "in everything and in time" (Veyne 2010: 43).

10 Similarly, Jean-Paul Sartre understood anxiety to be an expression of the human condition because humans are responsible for everything they do as beings thrown in the world (*Being and Nothingness*, 1956: Pt. 4, Ch. 2, III). Dodds refers to the human condition of "anxiety" during the period with which he is concerned as akin to Camus' sense of the "absurd" (Dodds 1965: 13, esp. Camus 1975). Heidegger and the existentialist philosophers, generally, refer to the analysis by the Danish philosopher Søren Kierkegaard of *Angst* in the theological context of "original sin" (Heidegger 1996: 190, n. 4).

11 Woody and Szechtman propose "a neurobiological-circuit model of the security motivation system, which consists of a cascade of cortico-striato-pallido-thalamo-cortical loops with brainstem-mediated negative feedback." They also "detail the broader physiological network involved, including regulation of the parasympathetic nervous system, with emphasis on vagal regulation of cardiac output, and activation of the hypothalamic-pituitary-adrenocoretical axis" (Woody and Szechtman 2011: 1019).

12 See also Boyer and Liénard (2006: 605–606). Rather than OCD being a pathological result of anxiety, recent research suggests that there may be a biological, even genetic, basis for OCD for which anxiety is a side effect rather than its defining feature (Murphy et al. 2010; Fields 2011: 58; Moyer 2011: 37–38).

13 Pascal Boyer and Pierre Liénard argue that ritualization effects a temporary overload on working memory which results in "goal-demotion" or an "imprecision about goals" (Boyer and Liénard 2006: 605–606).

14 Like "anxiety," views about "the nature of the soul" have their history. For a brief overview of this history in Graeco-Roman antiquity, see Bremmer (2002: 1–4). We may safely assume that Porphyry's view of the Mithraic soul was Platonic. However, the usual Platonic view of a soul–body dualism was interestingly qualified by Plato with respect to initiation into the mysteries (presumably, for Plato, the Eleusinian mysteries of Demeter). Initiates, Plato writes, constitute a communal "kinship of souls and bodies" (*syngeneia psychon kai somaton*) (Pl. *ep.* 7.334b7) "among themselves and probably with gods" (Burkert 1987: 77).

15 The cognitive archaeologist David Lewis-Williams has argued that sensations of descent and flights into a realm or realms above are hard-wired into the human brain and are activated in certain altered states of consciousness (Lewis-Williams 2010: 170; see Blanke et al. 2002: 269), such as those induced by religious rituals (Martin 1997, 2005b, 2006).

16 For Porphyry, "proportionate arrangement" refers to the "symbols of the elements and climates of the cosmos" which the mithraeum represented (Porph. *de antro.* 6); on Mithraic initiation as a process of cognitive re-representation, see Martin (2005b, 2009).

17 I contrast the directed "ritual stroll" of Mithraic initiation with Apuleius' Lucius' "fortuitous wandering," which served a contemporaneous metaphor for the "labyrinthian terrestrial world from which the gods were absent" in the Hellenistic period (Martin 1987: 10; see now Pachis 2008).

18 On "compression," see Fauconnier and Turner (2002: 113–138).

19 Chris Frith refers to a short story by Jorge Luis Borges—"On Exactitude in Science"—in which he imagines a country where geographers constructed a map " 'that was the same size as the country and coincided with it at every point.' This map was completely useless" (Frith 2007: 126, n. 16, Borges 1998).

20 In addition to place cells, "border cells," "head direction cells," and "grid cells" have subsequently been discovered in rodents (Dudchenko 2010: 164, 191–200); Dudchenko concludes that the indirect evidence for the presence of such cells in human brains is "compelling" (2010: 255).

21 The notion of "cognitive map" is similar to that of "cognitive environment" as proposed by Dan Sperber and Dierdre Wilson (1999: 38–46). While cognitive maps organize spatial representations, cognitive environments are more general sets of assumptions which an "individual is capable of mentally representing and accepting as true" (Sperber and Wilson 1999: 46).

22 The metaphor of mutually inhibitory mental representations is adapted from Lakoff (2008: 88, 119).

Chapter 6

1 I am indebted to Roger Beck for this reference and refer the reader to his discussion of Varro's aviary as an "image of the universe" (Beck 2006: 121–123).

2 The inscription HOMINIBUSBAGISBITAM or *hominibus vagis vitam* ("life to wandering men") is actually on the base of a Dionysian sculpture scene (*CIMRM* 822) but found in the Walbrook Mithraeum in London. See Toynbee (1986: 62–63) and Pachis (2008: 388–405).

3 I have discussed some of the material in this section in Martin (2013a).

4 Sociopolitical networks have been analyzed by some sociologists, especially since the work of Manuel (Castells 1996); see also Barney (2004).

5 Although I will refer to "Mithraism" in this paper, the plurality of its decentralized distribution argues again any "essentialization" of this category. See Martin (2014).

6 Actually, for Milgram, 5.5 degrees. The idea for tracking degrees of connectedness goes back to "Chain-Links," a 1929 short story, by Frigyes Karinthy. The actual phrase "six degrees of separation" seems to go back to a play by that name written by John Guare in 1990.

7 Anthropologist Dan Sperber has offered a micro-variable explanation for such networking at the level of human cognition by tracking what he calls "cognitive causal chains," which stabilize cultural contents and forms, and the "social cognitive causal chains" by which they are distributed (Sperber 2006). Some cognitive causal chains, he concludes, "involve large numbers of successive face-to-face interactions, some involve a few one-to-many communications, some involved staged public events such as rituals, some involve fabrications of specific artifacts, and so forth" (Sperber 2006: 437). I hope, at some point, to pursue Sperber's suggestion with respect to the Mithraic diaspora.

8 There is a single inscription from a Mithraic context at the end of the fourth century that refers to a *pater patrum* (Beck 2006: 98) but this may refer to the biological relationship of this *pater patrum* to his son, also a Mithraic *pater*, rather than to any late development toward a hierarchical, translocal leadership.

9 At each of the sites where Legio V Macedonica was stationed, from 167 until the second half of the third century, Mithraic dedications are attested, for example, in Dacia at Potaissa (*CIMRM* 1921, 1929), and in Pannonia at Poetovia (*CIMRM* 1590, 1592, 1594, 1596).

10 I am indebted to Roger Beck for this reference. For a brief description of the templum, see Cornford (1912: 31–32).

11 The notion of "cognitive map" is similar to that of "cognitive environment" as proposed by Dan Sperber and Dierdre Wilson (1995). While cognitive maps organize spatial representations, cognitive environments are more general sets of assumptions which an "individual is capable of mentally representing and accepting as true" (Sperber and Wilson 1999: 46).

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13 Cognitive neuropsychologist Christopher Frith refers to a short story by Jorge Luis Borges—"On Exactitude in Science"—in which he imagines a country where geographers constructed a map " 'that was the same size as the country and coincided with it at every point.' This map was [of course] completely useless" (Borges 1998: 325; Frith 2007: 126, n. 16).

14 On the imagery of the mithraeum and that of the tauroctony as comprising a language of "star-talk," see Beck (2006: 153–189) and Martin (2012).

Chapter 7

1 I use the term "cult" in Durkheim's sense of "a system of diverse rites, festivals and ceremonies … that … reappear periodically" (Durkheim 1915: 80).

2 For a discussion of social formation and mythmaking among early "Christian" groups at this time, see Cameron and Miller (2004).

3 The recently discovered fragment of a "Mithraic Catechism" from Egypt (Brashear 1992)—if, indeed, it is Mithraic—would represent an example of a local codification of Mithraic teaching (Martin 1994a). The import of such a text is mitigated by the otherwise complete absence of textual evidence surviving from the cult or of contemporaneous references to the existence of such texts. Although this conclusion could reflect a taphonomic bias, in which generalized historiographical conclusions are based solely on fortuitously surviving data, the dense distribution of Mithraic cults throughout the Roman Empire, together with comparative studies of other religious groups of the period, such as the early Christianities, would argue for an acceptance of Mithraic exceptionalism on this evidential point.

4 A *M. Aur. Rufinus evocatus* is also known from an inscription from Siscia (modern Sisak, Croatia), which identifies him as a native of Bizye in Thrace (modern Vize, Turkey) (*CIL* VI 32640; *CIMRM* 2350). Since the name was common, however, the identification of these two *evocati* remains speculative (Clauss 1992: 236, n. 4).

5 Adolf von Harnack already observed in 1902 that areas of Hellenistic culture throughout the Near East were resistant to the spread of Mithraism (Harnack 1902: 534–535), as was, of course, Greece itself—though there are an increasing number of Mithraic finds from Greece: a building from Eleusis, the Mithraic identification of which is questionable (*CIMRM* 2349); some finds from Athens (*CIMRM* 2346, 2347; Oikonomides 1975: 77–84) and Pireaus (*CIMRM* 2348); damaged tauroctonous scenes from Patras (*CIMRM* 2351; Erophili-Iris 2003) and Argolis (*CIMRM* 2353), and, as might be expected, from the cosmopolitan port of Thessaloniki (Pachis 1994). On the presence of Mithraism in Roman Egypt, see Martin (2013); on Syria, see Hopfe (1990) and Chalupa (2010).

6 R. E. Witt has noted that he has located the Andros *spelaeum* (Witt 1975: 483, n. 39).

7 The principal exception to the seemingly standardized composition of the Mithraic tauroctony is the freestanding marble sculpture from the *Terme di Mitra* in Ostia (*CIMRM* 230), which represents such a significant departure from

the prevailing model that even a colleague generally unfamiliar with Mithraic iconography was able to note the difference. This statue portrays a capless Mithras wearing a Greek tunic rather than in his characteristic Persian cap and garb. He is looking ahead, somewhat heroically, rather than looking away from the bull over his right shoulder, and while brandishing a sword or knife, he is not portrayed in the actual act of killing the bull. The usual accompanying symbols (e.g., serpent, dog, scorpion) are absent. Compare, for example, the more typical freestanding sculptures from Rome (*CIMRM* 557, 584, 592, 593, 605). The Ostian statue, signed by Criton of Athens (*CIMRM* 231), was apparently made in Greece and shipped from there to Italy. And compare the equally unusual tauroctony from Egypt, now in the Egyptian Museum, Cairo (Strzygowski 1904: #7260 [p. 10]).

8 "Caesar" in lines 1 and 2 of the inscription (according to the layout of the text in *CIMRM*) should either be in the genitive case (i.e., "*Caesaris*" rather than the dative "*Caesari*") or "*Caesari*" needs to be understood as a rather unconventional abbreviation as Vermaseren seems to imply with his unremarked restoration (*CIMRM* 2350). Competence in both Greek and Latin language and literature, while costly, remained a feature of Roman education throughout the imperial period (Muir 1996: 509).

9 It is worth emphasizing that the only signed, and presumably commissioned, Mithraic sculpture is one of the very few representations that differs in important respects from the overwhelmingly faithful reproductions of the image throughout the empire (see n. 7 *supra*).

10 Of the some 1058 Mithraists known by name from the epigraphic record, only 170 record their initiatory status although they otherwise meticulously registered their social standing or, as in the case of Rufinus, their military status (Clauss 2001: 131; 1992: 275–276). The exceptions were those dedicators who had status as a religious specialist in Mithraism, i.e., as an initiate into the important mid-grade of *Leo* or into the ultimate grade of *Pater* (Clauss 1990: 185).

11 I follow Sperber in not differentiating between "social" and "cultural" information (Sperber 1996: 9).

12 Wikipedia gives examples of "Chinese whispers" from sixteen different languages (http://en.wikipedia.org/wiki/Chinese_whispers; accessed 3/25/09).

13 The anecdotal evidence for the entropic character of information in transmission was confirmed experimentally by that pioneer of modern memory research, F. C. Bartlett, in his research with various chains of reproduction, of which he concluded that "the final result, after comparatively few reproductions, would

hardly ever be connected with the original by any person who had no access to some intermediate versions" (Bartlett 1932: 171).

14 Although compositionally different from the tauroctony, bull sacrifices are documented, for example, on a Roman coin from 81 BC, with Diana the huntress on the obverse (www.coinscatalog.com/forums/showthread.php?t=16; accessed 3/9/09), on a number of coins from the early third century, with Elagabalus on the obverse (www.aeqvitas.com/photo.php?freeform=altar; accessed 3/9/09), and, of course, as part of the important Roman ritual of the *suovetaurilia*, depicted, among other places, on the altar of Domitius Ahenobarbus from ca. 146 BC (www.myartprints.com/a/anonymous/scene-of-the-sacrifice-of-1.html; accessed 3/9/09), and on Trajan's column (completed in 113 in Trajan's Forum). The likely perception of the Mithraic tauroctony as a scene of sacrifice rather than one of hunting is reinforced by a similar (protypical?) image, from the Athenian Acropolis, of Niké slaying a bull that was popular during the early period of Mithraism (Gordon 1988: 65; Zwirn 1989: 15; Turcan 1996: 229; see also images in the British Museum of Niké astride a bull, raising its head by its nose with her left hand, while holding a sacrificial knife in her right: www.mlahanas.de/Greeks/Mythology/Nike.html, accessed 3/9/09; and http://worldvisitguide.com/oeuvre/photo_ME0000087853.html, accessed 3/9/09.

Of course, the dramatic rite of the *taurobolium* was celebrated in the Roman cult of Cybele. Although the word *taurobolium* initially referred to the hunting and struggle of a bull, sometime during the first century BC and the first AD, it came to signify sacrifice of the animal prior to its incorporation into the cult of Cybele (Duthoy 1969: 125).

The sacrificial nature of the tauroctony is distinguished from hunting scenes popular among Rome (e.g., the mosaics preserved in the Villa Romana del Casale, Piazza Armerina, Sicily), and for which there are also specifically Mithraic representations. Perhaps the most well-known is the famous fresco from the Dura-Europas mithraeum (Hinnells 1975, II, Pl. 24; reconstructed by Merkelbach 1984: Pl 17; see also *CIMRM* 1289 and 1292, f). In hunting scenes, the prey is wild animals rather than the domesticated animals required of sacrifice. And the tool of hunting employed by Mithras in the Dura-Europs scene is the characteristic small hunting bow and arrows usually employed by Romans along with nets and slings, two kinds of spears—one for throwing, one for thrusting. In Roman hunts, hunted animals would be finished off with the thrusting spear and not with the knife wielded by Mithras in the tauroctony. While hunting and sacrifice are, of course, both related to "aspects of a wider domination of the natural world"

(Gordon 1988: IV, 64), it would be unusual to find hunting scenes mounted behind the altars of cult sites. As the historian Paul Veyne has summarized, "only sacrifice effectively penetrated the barrier separating humanity and the supernatural" (Veyne 2010: 94).

15 Sacrifice *to* Mithras (Strab. *geog.* 15.3); sacrifice *taught* by Mithras (Plutarch *Is. et Os.* 46); sacrifice *in the name of* Mithras (Plutarch *Pom.* 24–25; Pallas in Porphyry, *de abstin.* 2.56).

16 On the other hand, the not unrelated hypothes is that minimally expectation-violating features have transmission advantages does have some experimental support (Barrett and Nyhof 2001).

17 For a consideration of context for recall, see Gonce et al. (2006).

18 For recent discussions of memes, see Dennett (1991: 200–210; 1995: 335–370, 473–476); Brodie (1996); Sperber (1996: 100–108); and Blackmore (1999).

19 Most recently, mirror neurons, as the "enablers of imitation," have been proposed as the mechanism whereby "memes" might be transmitted. However, the transmission of information by the activation of these neurons is restricted to the behavioral domain of imitation (Iacoboni 2008: 50–52).

20 For an overview of arguments for the number of Mithraic levels of initiation being seven (i.e., the highest level Pater, followed by Heliodromus, Perses, Leo, Miles, Nymphus, and Corax), see Chalupa (2008).

21 On the possibility of female initiates into some Mithraic communities—a not unthinkable occurrence given the absence of any centralized administrative control over Mithraic thought and practice and in comparative light of the contemporary initiation of women into previously all-male fraternal groups such as atypical lodges of Freemasons—see David (2000) and Griffith (2006).

22 Arguing with reference to the complex panels that sometime frame tauroctonous representations, Richard Gordon concludes that it is unwarranted to conclude "that all the scenes have a narrative intention, let alone the same one, the representation of a legend of Mithras" (Gordon 1980b: IX, 220).

23 In addition to regional similarities among proximal Mithraic distributions, we can presume some continuities between distal Mithraic cultures that were transmitted by initiates of one cell who relocated to another part of the empire, as doubtlessly would have been the case with the Mithraeum founded by Rufinus and his Praetorian colleagues on Andros and that at their home barracks in Rome, the *castra praetoria*. Locally and regionally constrained Mithraic motifs and the lines of their more widely distributed similarities have yet to be delineated.

24 Some scholars have identified doctrinal "tendencies" in the Roman Mithraisms (e.g., Beck 2004: 96–99). Such tendencies may appear in be present in typological

(synchronic) analysis. However, it is important to emphasize that Whitehouse's modes theory is a diachronic (historical) model.

Since the presence of such doctrinal tendencies, as a high degree of unified and consistent corpus of teachings or doctrines presided over and controlled by a dynamic and centralized leadership, would contribute a transmissive advantage to groups in which they are present, it is telling that such tendencies, even if correctly identified among the earlier documented Mithraisms, never developed over the some 300 years of their history. Since the general diachronic feature of Mithraic transmission in the imagistic mode is one of ideological fluidity, it is perhaps more appropriate to follow the lead of scholars of the Hellenistic Judaisms and of the early Christianities (e.g., Neusner et al. 1987; Smith 1990) and speak in the plural as the Roman *Mithraisms*.

25 Neuro-imaging research on memory has found that the hippocampus provides temporal and spatial context, whereas cortical traces of memorized information are primarily context free. Episodic memory, whether old or new, relies on hippocampal-cortical networks, whereas remote semantic memories can be retrieved independently of the hippocampus (Roediger et al. 2007; see also Kapogiannis et al. 2009: 4878).

26 There is no indication that Graeco-Roman antiquity affords any special accommodation to, or poses any unusual problems for, an approach from the cognitive sciences than is the case with other historical periods and cultures (Roger Beck, private communication, December 16, 2009).

27 Beck identifies just two such axioms: (1) Mithras [is] Deus Sol Invictus and (2) Mithraists expressed themselves in terms of a "Harmony of Tensions in Opposition" (Beck 2006: 5–6).

Chapter 8

1 "*Nymphus*" is a masculinized form of the feminine Greek noun *numphê*. Like the masculinized figure of Psyche represented on the Capuan relief, this masculine form of the noun also appears only in a Mithraic context (Merkelbach 1984: 88, see 77, n. 2). *Nymphē* can mean either "bride" or the "pupa of bees or wasps." Merkelbach concludes, apparently by association, that this masculine neologism means "human pupa" and refers to the second stage of Mithraic initiation. We might also cite the monograph on *Cupid and Psyche* by Carl Schlam (1976), in which he noted that the imagery of the pupa "suggests a concept of the immortality of the soul, rising from the body like the chrysalis from the pupa."

Further, and referencing the neglected article on this topic by Otto Immisch (1915), Schlam (1976: 8) concludes that "Greek terms for earlier stages of the cycle of the butterfly support this interpretation". We can also note that Porphyry uses *nymphai*, which he analogizes to "pleasure seeking bees," to refer to souls seeking birth (Porph. *de antro*. 18).

2 A commentary on Plato's *Parmenides* is attributed to Porphyry.

3 On the possible initiation of women into some Mithraic associations, see David (2000). Professor Giovanni Casadio has called my attention to and kindly supplied me with a copy of a photograph showing a scene from a Mithraeum in Budapest in which Mithras is portrayed grasping the hand (leading?) a nude figure (initiate?) that is unmistakably female (Póczy et al. 1989: 25).

4 A marble group of Eros and Psyche has been found in the Iseum at Savaria—modern Szombathely—in western Hungary (Vermaseren 1971: 23, n. 4).

5 It can be mentioned that the so-called Mithras Liturgy from the *Greek Magical Papyri* opens with an invocation of Psyche (*PMag*. 1. 475), though Psyche is here paired with Pronoia. Some scholars have read *Tychē* for *Psychē* (Betz 2003: 88–89).

6 Cognitive innateness, like biological structure, does not (necessarily) imply a direct causal connection between genetic inheritance and adult behavior. One cognitivist, Michael Tomasello, has cautioned that "[t]he search for the innate aspects of human cognition is scientifically fruitful to the extent, and only to the extent, that it helps us to understand the developmental processes at work during human ontogeny" (Tomasello 1999: 51). He addresses Karmiloff-Smith's (1992) hypothesis as a possible description of one such developmental process (Tomasello 1999: 194–197). The philosopher Andy Clark has emphasized the crucial importance for developmental processes of structured environmental resources upon innate cognitive capacities (Clark 1997).

7 I do not argue that Mithraic initiation replicates in any precise way the specific developmental formats of representational redescription modeled by Karmiloff-Smith nor am I qualified to argue for the validity for her specific model. My suggestion is simply that the incremental process of Mithraic initiation replicates a developmental process of cognitive maturation like that described by Karmiloff-Smith.

8 The production of internal representations by initiatory rites and any "spontaneous exegetical reflections" (Whitehouse 2003: 305) upon them stand in stark contrast to the knowledge maintained and transmitted within a second mode of religiosity described by Whitehouse and termed by him "doctrinal." In this modality, large-scale, anonymous communities cohere around bodies of

teachings and beliefs held to be "orthodox" by a centralized authority and are maintained and transmitted by that authority through repetitive and routinized ritual instruction (Whitehouse 2004).

9 Because rites of initiation are considered to be performed by the deity itself, in this case by Mithras, or by his authorized surrogate, probably, in this case, by the presiding Pater, the cognitivists of religion E. Thomas Lawson and Robert N. McCauley have characterized such rites as "special agent rituals." Because such rituals are considered to be performed by the deity himself (or by his surrogate), they are considered to be especially efficacious and need, consequently, be performed but once or, at most, infrequently. Such singularly potent events of divine activity are accompanied by heightened sensory pageantry that contributes, consequently, to their memorability (McCauley and Lawson 2002: 26–33).

10 Whether initiation rites involve an extended series of trials over a period of months (or years), as is the case among a number of tribal societies, for example, the Nkanu of Angola and the Democratic Republic of the Congo (Eickel 2001; van Damme 2002), or whether they are structured by a discrete number of stages, as in Mithraism and among a number of other tribal societies, for example, the Baktaman of Papua New Guinea, who like (at least some of) the Mithraists, count seven grades of initiation (Barth 1987: 12), they should not be viewed as an event or a series of events but as a process which occurs over time. As a cognitive process, what is required is a sufficient period of time over which such a cognitive process of representational redescription, as described by Karmiloff-Smith (1992), might be reinforced and developed. This cognitive process is further reinforced by the repeated participation of initiates as initiators.

11 Emphasis on the local character of Mithraic knowledge and practice did not preclude the "emergence" of certain more widely, even universally, shared Mithraic traits and practices from among the network of autonomous Mithraic cells, even in the absence of any centralized structure or organization. On non-centralized processes of biological and cognitive emergence, "in which some kind of higher-level pattern emerges from the interactions of multiple simple components without the benefit of a leader, controller, or orchestrator" (Clark 1997: 73), see Clark (1997: 72–75, 103–128, 163–166) and Johnson (2001).

12 Whereas such rites as the course of Mithraic initiation encouraged and supported the development and expansion of cognitive capacity, formal education included, in addition, an intellectual mastery of some prescribed content (Clark 1997: 205).

13 Today, we might refer to such honed but non-schooled knowledge as "street smarts."

Chapter 9

1 This chapter is dedicated to the memory of my colleague and good friend Gary Lease.

2 Unless volume and page number is indicated, as here, numerical references to *CIMRM* are to the serial monument entries or to figure and plate numbers.

3 *CIMRM* 91–93. Figure Nr. 34 in *CIMRM* is incorrectly attributed to *CIMRM* 91; it actually refers to *CIMRM* 92 and is corrected in vol. 2 of *CIMRM* (1960), 17. A photograph of *CIMRM* 91 is now available in G. Grimm and D. Johannes 1975: 23 (Nr. 38) and Plate 73. A photo of *CIMRM* 93 can be found in J. Strzygowski 1973: 10, #7260. Apparently, the large relief, listed as *CIMRM* 91 and in Grimm and Johannes, 23 (Nr. 38) and Plate 73, was discovered sometime after 1911 since it was not listed in the Cairo Museum collection in 1900 when Strzygowski compiled his catalogue nor was it listed by G. Maspero in his *Guide du visiteur au Musée du Caire* (1912), prepared in 1911. Whatever its origin, it was presumed to be from Memphis and is displayed with the previously found two reliefs (Lease 1986: 116–117). Whereas the two earlier discovered reliefs do not conform well with the more standardized tauroctonies widely characteristic of Roman Mithraism—especially *CIMRM* 93; Strzygowski 1973: 10, #7260—the subsequently discovered relief (*CIMRM* 91; Grimm and Johannes 1975: 23, Nr. 38, and Plate 73), though somewhat damaged, is a classic representation of the Roman Mithraic tauroctony (Lease 1986: 115–116).

A handful of seemingly Mithraic fragments have also been found that are usually attributed to the mithraeum of Memphis (*CIMRM* 94–101; Strzygowski 1973: 9–15, #7258, 7261–7270). These Mithraic fragments were reportedly first seen in 1847 east of Mît Rahîna (near Memphis) in 1849 by Anton Ritter von Laurin, the Austrian consul-general in Egypt from 1834 to 1849, although von Laurin attributed these fragments to the Persian king Cambyses (Arneth 1849: 253); Lease cites von Lauren's letter to Arneth in which von Laurin reports receiving Mithraic items from Mît Rahîna as early as 1838 (Lease 1986: 116, n. 10). Citing the *Journal d'entrée, Catalogue général des antiquités égyptiennes du Musée du Caire*, Strzygowski notes that the number of artifacts from this find was larger than he had catalogued in 1904 (Strzygowski 1973: 9).

4 Roger Beck has suggested that Tiberius Claudius Balbillus provides an example of a possible "conduit" for the leontocephaline figure from Egypt into the Mithraic mysteries (Beck 1998: 115–128). Balbillus was head of the Museum and Library of Alexandria (Reisch et al. 1923: 128), prior to being appointed by Nero as Prefect of Egypt from 55 to 59 (Tac. *ann.*13.22). Balbillus was "related by

marriage, possibly too by blood, to the Commagenian dynasty," whose members, Beck has argued persuasively, provided the context for the origin of Mithraism as a "synthesis of Iranian religion and Greek learning," specifically, among "the entourage of the deposed yet honoured Antiochus IV, invited to live in the capital [Rome] by the emperor [Vespasian]." Under Vespasian, Balbillus returned to Rome where he lived until his death c. 79 (Beck 1998: 42–43 and nn. 60 and 61).

5 This text has a, perhaps, 200-year composition history before its final redaction in the early fourth century and *may* draw upon Mithraic cult practice (Betz 2003: 9).

6 Daniels also notes that Mithraism was "virtually non-existent" on the eastern frontiers of the empire, that is, Syria (with the notable exception of Dura Europas) (1975: 272; see also Hopfe 1990, and Chalupa 2010). Adolf von Harnack had already observed in 1902 that areas of Hellenistic culture throughout the Near East were resistant to the spread of Mithraism (1902: 534–535), as was, of course, Greece itself—though there are an increasing number of Mithraic finds from Greece: a building from Eleusis, the Mithraic identification of which is, however, questionable (*CIMRM* 2349); some finds from Athens (*CIMRM* 2346, 2347; Oikonomides 1975: 77–84), from Pireaus (*CIMRM* 2348); damaged tauroctonous scenes from Patras (*CIMRM* 2351; Erophili-Iris 2003: 397–427); from Argolis (*CIMRM* 2353), an inscription dedicating a Mithraeum on the island of Andros (*CIMRM* 2350; Martin, Chapter 7, this volume), and, as might be expected, from the cosmopolitan port of Thessaloniki (Pachis 1994: 229–255).

7 Evidence for spread of Mithraism by the military in Northern Africa: M. Valerius Maximianus, commander of Legio XIII Gemina, had dedicated an altar in a mithraeum in Apulum (Alba Julia in Dacia, modern Rumania) (*CIMRM* 1950) and, subsequently, as commander of the Legio III Augusta from 183 to 185 AD, he consecrated altars at Lambaesis in Numidia (*CIMRM* 137, 138B). Maximianus was born at Poetovio (modern Ptuj) in Dalmatia where there were three large mithraea. M. Aurelius Sabinus, a native of Carnuntum, and commander of the Legio III Augusta from 235 to 238, also consecrated an altar at Lambaesis (*CIMRM* 134). Mithraic remains have been found at Sitifis (Mauretania) (*CIMRM* 148–150) and at Troesmis in Moesia (*CIMRM* 2281–2287), where the Legio II Hercula had been stationed at different times (*CIMRM* 149).

8 The Roman legions stationed in or near Alexandria were:

Legio III Cyrenaica (served in Egypt from 30 BC until 120 or 127);
Legio XXII Deiotariana (shared a camp with III Cyrenaica at Nicopolis from 25 BC);

> Legio II Traiana Fortis (shared a camp with XXII Deiotariana from 125 until 132 when Legio XXII was redeployed to Judea);
> Legio II remained in Egypt until the mid-fifth century AD.
>
> (Adkins and Adkins 1994: 275).

9 Beck has suggested that the Legio V Macedonica was first exposed to Mithras worship by Commagenian troops who participated in the siege of Jerusalem in 70 AD (Beck 1998: 37–38, n. 40).

10 An English translation of Sozomenos and Socrates can be found in Geden (1990: 68–70).

11 The church built by the patriarch Theophilus over the ruins of a mithraeum may have been the Church of Saint Mark, currently the site of the Greek Orthodox Church of Saint Sabba, which is constructed on the original site of the Roman forum in Alexandria, in front of the Caesareum (Savvopoulos 2010a: 182, and personal communication April 10, 2011). According to tradition, Mark, of course, is considered the founder of Christianity in Alexandria.

12 Contemporary scholarship generally agrees with Tacitus (Heyob 1975: 3, n. 10).

13 The Lycopolitan statue of Helios is exhibited in the South Dome Room of the Neues Museum, Berlin, along with a large marble statue of Isis-Fortuna (*SMB*). The statue of Helios is situated with an unobstructed view of the North Dome Rome and of the famous bust of Queen Nefertiti, who was, of course, devoted to solar worship.

14 The identification of Severus and his son Antoninus with Sarapis did not preclude the *evocatus* Marcus Aurelius Rufinus and three other members of Severus' reorganized Praetorian Guard from dedicating a mithraeum to the well-being (*salus*) of Severus and his sons upon their deployment to the Greek island of Andros (*CIMRM* 2350; Martin, Chapter 7, this volume), nor of references to or representations of Sarapis being situated in Western mithraea, notably in the capital city of Rome (e.g., *CIMRM* 356, 463, 479). For something of the alternating fortunes of these two deities in Rome, see the inscription from the mithraeum in the Baths of Caracalla identifying Sarapis with Zeus and Helios (*CIMRM* 463) in which the name of Sarapis was replaced with that of Mithras sometime after 217 (MacMullen 1981: 83; Turcan 1996: 93).

15 In his *Atlas de la Diffusion des Cultes Isiaques,* Laurent Bricault catalogues over 1,000 Isiac finds but cautions that "San doute ne faut-il pas voir un lieu de culte isiaque dans chaque site … mentionné dans cet *Atlas*" (2001: xii). Further, Bricault catalogues Isaic finds from the fourth century BC to the fourth century AD, which includes Isaic sites four centuries prior to the emergence of

Mithraism. Robert Turcan notes that "outside urban and administrative centres, the Nilotic religion scarcely appears to have taken root [in the Roman Empire] except along the major trunk roads and great trading routes" (Turcan 1996: 96). In his survey of Mithraism, Manfred Clauss notes that "Evidence for the cult has been found at some 420 sites. There are about 1,000 inscriptions and 700 depictions of the [Mithraic] bull-killing; … in addition [to] 400 other [Mithraic] objects" (Clauss 2000: xxi).

16 On the attribution of cultural traits to gods, see already the observation by Xenophanes that "Ethiopians say that their gods are snubnosed and black; Thracians that they are pale and red-haired" (Xenoph., *fr.* 16); also, "if cattle and horses and lions had hands or could paint with their hands and create works such as men do, horses like horses and cattle like cattle also would depict the gods' shapes and make their bodies of such a sort as the form they themselves have" (Xenoph., *fr.* 15).

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